default

COLLABORATORS

	TITLE : default		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		August 24, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

default

1.1 The New Hacker's Dictionary

                    The New Hacker's Dictionary, version 3.3.1

            Converted
             into AmigaGuide® by Jens T. Berger Thielemann

                        Version 3.3.1

                        January 1996

                    Please select a link

            Intro

    =   A   =

    =   B   =

    =   C   =

    =   D   =

    =   E   =

    =   F   =

    =   G   =

    =   H   =

    =   I   =

    =   J   =

    =   K   =

    =   L   =

```
              =      M      =

              =      N      =

              =      O      =

              =      P      =

              =      Q      =

              =      R      =

              =      S      =

              =      T      =

              =      U      =

              =      V      =

              =      W      =

              =      X      =

              =      Y      =

              =      Z      =

              = [^A-Za-z] =

              Appendices

              Index
```

1.2 The conversion process

The original sources where converted into AmigaGuide® by using ←
two Perl
scripts:

split.pl
-- this script splits the lexicon entries into one file per
leading character. The intro part receives the name jarg__, the
remaining use the last '_' to indicate which character they
contain. The appendices and the non-alphabetical entries will
still have to be separated manually...:\

Please note that you'll need several megabytes of free mem to run
this script - we'll slurp in the whole file, and duplicate it in
memory + perl needs some megabytes itself...:) About 6-7MB should
be sufficient, though.

```
                amiguide.pl
                -- this  script inserts crosslinks and additional markup on
        each part.
```

Both scripts are of course copyright 1996 Jens T. Berger Thielemann, and
are released as GNUware. No warranties, of course. More formally, here
the full version runs:

```
  split.pl/amiguide.pl v1.0, converts Jargon files into AmigaGuide.
  Copyright (C) 1996 Jens T. Berger Thielemann

  This  program  is free software; you can redistribute it and/or modify it
  under  the  terms  of  the GNU General Public License as published by the
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  675 Mass Ave, Cambridge, MA 02139, USA.

  Contact the author at:
    Jens Berger
    Spektrumvn. 4
    N-0666 Oslo
    Norway
    E-mail: <jensthi@ifi.uio.no>
```

1.3 amiguide.pl

```perl
#!/usr/bin/perl

;@args = sort @ARGV;
%nodes = ();


while(<>) {
    if(/^:([^:]+):/) {
  $nodes{$1} = "\"$ARGV\" $.";
    }
    close(ARGV) if (eof);
}

;@ARGV = @args;


$printhead = 1;

open(GUIDE, ">jargon.guide") || die "Could not open file, $!\n";

while(<>) {
```

```
    if($printhead) {
  $name = $ARGV;
  $name =~ s/^jarg_//;
  print GUIDE "@endnode\n@node $ARGV \"$name\"\n";
  $printhead = 0;
    }
    s/\{{1,2}([^\}]+)\}{1,2}/&writelink($1)/ge; # Fix links

    s/^:([^:]+)::/@{b}@{u}$1@{uu}@{ub}/; # Fix major entries
    s/^:([^:]+):/@{b}$1@{ub}/; # Fix minor entries

    /[^@]\{/ && print "\"$ARGV\", line $.:Possible multiline link.\n";

    print GUIDE;

    if(eof) {
  $printhead = 1;
  close(ARGV) if (eof);
    }
}

print GUIDE "@endnode\n@node index \"Index\"\n";


$bline = 1;

foreach $key (sort stricmp keys(%nodes)) {
    printf GUIDE (" @{\"%-38.38s\" LINK %s}", $key, $nodes{$key});
#    printf("%-38.38s", $key, $nodes{$key});

    if($bline) {
  print GUIDE " ";
  $bline = 0;
    } else {
  $bline = 1;
  print GUIDE "\n";
    }
}
print GUIDE "@endnode\n";

sub writelink {
    local($ref) = @_;

    if(defined($nodes{$ref})) {
  "@{\"$ref\" LINK $nodes{$ref}}";
    } else {
  print "\"$ARGV\", line $.: Undefined link $ref.\n";
  "{$ref}";
    }
}

sub stricmp {
  "\U$a\E" cmp "\U$b\E";
}

#foreach $key (keys(%nodes)) {
```

```
#    if($len <= length($key)) {
# $len = length($key);
# print "$len: $key\n";
#    }
#    $len = $len >= length($key) ? $len : length($key);
#}

#print "Len: $len\n";
```

1.4 split.pl

```
#!/usr/bin/perl

undef $/;
$_ = <>;


; @nodes = split(/(= \w =\n=====\n\n)/);

unshift(@nodes, "= _ =\n=====\n\n");

while($#nodes >= $[) {
    $name = shift(@nodes);
    $node = shift(@nodes);

    if($name =~ /= (\w) =\n=====\n\n/) {
  $file = 'jarg_' . $1;
    }
#    print "$file\n"
    open(FILE, ">$file");
    print FILE $node;

}
```

1.5 Introduction

```
        #======= THIS IS THE JARGON FILE, VERSION  3.3.1,  25 JAN 1996  ↩
            =======#
```

This is the Jargon File, a comprehensive compendium of hacker slang
illuminating many aspects of hackish tradition, folklore, and humor.

This document (the Jargon File) is in the public domain, to be freely
used, shared, and modified. There are (by intention) no legal
restraints on what you can do with it, but there are traditions about
its proper use to which many hackers are quite strongly attached.
Please extend the courtesy of proper citation when you quote the File,
ideally with a version number, as it will change and grow over time.
(Examples of appropriate citation form: "Jargon File 3.3.1" or "The
on-line hacker Jargon File, version 3.3.1, 25 JAN 1996".)

The Jargon File is a common heritage of the hacker culture. Over the

years a number of individuals have volunteered considerable time to
maintaining the File and been recognized by the net at large as
editors of it. Editorial responsibilities include: to collate
contributions and suggestions from others; to seek out corroborating
information; to cross-reference related entries; to keep the file in a
consistent format; and to announce and distribute updated versions
periodically. Current volunteer editors include:

        Eric Raymond esr@snark.thyrsus.com (215)-296-5718

Although there is no requirement that you do so, it is considered good
form to check with an editor before quoting the File in a published
work or commercial product. We may have additional information that
would be helpful to you and can assist you in framing your quote to
reflect not only the letter of the File but its spirit as well.

All contributions and suggestions about this file sent to a volunteer
editor are gratefully received and will be regarded, unless otherwise
labelled, as freely given donations for possible use as part of this
public-domain file.

From time to time a snapshot of this file has been polished, edited,
and formatted for commercial publication with the cooperation of the
volunteer editors and the hacker community at large. If you wish to
have a bound paper copy of this file, you may find it convenient to
purchase one of these. They often contain additional material not
found in on-line versions. The two 'authorized' editions so far are
described in the Revision History section; there may be more in the
future.

Introduction
****

This document is a collection of slang terms used by various
subcultures of computer hackers. Though some technical material is
included for background and flavor, it is not a technical dictionary;
what we describe here is the language hackers use among themselves for
fun, social communication, and technical debate.

The 'hacker culture' is actually a loosely networked collection of
subcultures that is nevertheless conscious of some important shared
experiences, shared roots, and shared values. It has its own myths,
heroes, villains, folk epics, in-jokes, taboos, and dreams. Because
hackers as a group are particularly creative people who define
themselves partly by rejection of 'normal' values and working habits,
it has unusually rich and conscious traditions for an intentional
culture less than 40 years old.

As usual with slang, the special vocabulary of hackers helps hold
their culture together -- it helps hackers recognize each other's
places in the community and expresses shared values and experiences.
Also as usual, *not* knowing the slang (or using it inappropriately)
defines one as an outsider, a mundane, or (worst of all in hackish
vocabulary) possibly even a
                suit
                . All human cultures use slang in
this threefold way -- as a tool of communication, and of inclusion,

and of exclusion.

Among hackers, though, slang has a subtler aspect, paralleled perhaps
in the slang of jazz musicians and some kinds of fine artists but hard
to detect in most technical or scientific cultures; parts of it are
code for shared states of *consciousness*. There is a whole range of
altered states and problem-solving mental stances basic to high-level
hacking which don't fit into conventional linguistic reality any
better than a Coltrane solo or one of Maurits Escher's 'trompe l'oeil'
compositions (Escher is a favorite of hackers), and hacker slang
encodes these subtleties in many unobvious ways. As a simple example,
take the distinction between a
                    kluge
                     and an
                    elegant
                     solution, and
the differing connotations attached to each. The distinction is not
only of engineering significance; it reaches right back into the
nature of the generative processes in program design and asserts
something important about two different kinds of relationship between
the hacker and the hack. Hacker slang is unusually rich in
implications of this kind, of overtones and undertones that illuminate
the hackish psyche.

But there is more. Hackers, as a rule, love wordplay and are very
conscious and inventive in their use of language. These traits seem
to be common in young children, but the conformity-enforcing machine
we are pleased to call an educational system bludgeons them out of
most of us before adolescence. Thus, linguistic invention in most
subcultures of the modern West is a halting and largely unconscious
process. Hackers, by contrast, regard slang formation and use as a
game to be played for conscious pleasure. Their inventions thus
display an almost unique combination of the neotenous enjoyment of
language-play with the discrimination of educated and powerful
intelligence. Further, the electronic media which knit them together
are fluid, 'hot' connections, well adapted to both the dissemination
of new slang and the ruthless culling of weak and superannuated
specimens. The results of this process give us perhaps a uniquely
intense and accelerated view of linguistic evolution in action.

Hackish slang also challenges some common linguistic and
anthropological assumptions. For example, it has recently become
fashionable to speak of 'low-context' versus 'high-context'
communication, and to classify cultures by the preferred context level
of their languages and art forms. It is usually claimed that
low-context communication (characterized by precision, clarity, and
completeness of self-contained utterances) is typical in cultures
which value logic, objectivity, individualism, and competition; by
contrast, high-context communication (elliptical, emotive,
nuance-filled, multi-modal, heavily coded) is associated with cultures
which value subjectivity, consensus, cooperation, and tradition. What
then are we to make of hackerdom, which is themed around extremely
low-context interaction with computers and exhibits primarily
"low-context" values, but cultivates an almost absurdly high-context
slang style?

The intensity and consciousness of hackish invention make a

compilation of hacker slang a particularly effective window into the
surrounding culture -- and, in fact, this one is the latest version of
an evolving compilation called the 'Jargon File', maintained by
hackers themselves for over 15 years. This one (like its ancestors)
is primarily a lexicon, but also includes 'topic entries' which
collect background or sidelight information on hacker culture that
would be awkward to try to subsume under individual entries.

Though the format is that of a reference volume, it is intended that
the material be enjoyable to browse. Even a complete outsider should
find at least a chuckle on nearly every page, and much that is
amusingly thought-provoking. But it is also true that hackers use
humorous wordplay to make strong, sometimes combative statements about
what they feel. Some of these entries reflect the views of opposing
sides in disputes that have been genuinely passionate; this is
deliberate. We have not tried to moderate or pretty up these
disputes; rather we have attempted to ensure that *everyone's* sacred
cows get gored, impartially. Compromise is not particularly a hackish
virtue, but the honest presentation of divergent viewpoints is.

The reader with minimal computer background who finds some references
incomprehensibly technical can safely ignore them. We have not felt
it either necessary or desirable to eliminate all such; they, too,
contribute flavor, and one of this document's major intended audiences
--- fledgling hackers already partway inside the culture -- will benefit
from them.

A selection of longer items of hacker folklore and humor is included
in Appendix A,
                 Hacker Folklore
                 . The 'outside' reader's attention is
particularly directed to Appendix B,
                 A Portrait of J. Random Hacker
                 .
Appendix C, the
                 Bibliography
                 , lists some non-technical works which
have either influenced or described the hacker culture.

Because hackerdom is an intentional culture (one each individual must
choose by action to join), one should not be surprised that the line
between description and influence can become more than a little
blurred. Earlier versions of the Jargon File have played a central
role in spreading hacker language and the culture that goes with it to
successively larger populations, and we hope and expect that this one
will do likewise.

Of Slang, Jargon, and Techspeak
===============================

Linguists usually refer to informal language as 'slang' and reserve
the term 'jargon' for the technical vocabularies of various
occupations. However, the ancestor of this collection was called the
'Jargon File', and hackish slang is traditionally 'the jargon'. When
talking about the jargon there is therefore no convenient way to
distinguish it from what a *linguist* would call hackers' jargon
--- the formal vocabulary they learn from textbooks, technical papers,

and manuals.

To make a confused situation worse, the line between hackish slang and
the vocabulary of technical programming and computer science is fuzzy,
and shifts over time. Further, this vocabulary is shared with a wider
technical culture of programmers, many of whom are not hackers and do
not speak or recognize hackish slang.

Accordingly, this lexicon will try to be as precise as the facts of
usage permit about the distinctions among three categories:

   * 'slang': informal language from mainstream English or
     non-technical subcultures (bikers, rock fans, surfers, etc).

   * 'jargon': without qualifier, denotes informal 'slangy' language
     peculiar to or predominantly found among hackers -- the subject
     of this lexicon.

   * 'techspeak': the formal technical vocabulary of programming,
     computer science, electronics, and other fields connected to
     hacking.

This terminology will be consistently used throughout the remainder of
this lexicon.

The jargon/techspeak distinction is the delicate one. A lot of
techspeak originated as jargon, and there is a steady continuing
uptake of jargon into techspeak. On the other hand, a lot of jargon
arises from overgeneralization of techspeak terms (there is more about
this in the
                  Jargon Construction
                   section below).

In general, we have considered techspeak any term that communicates
primarily by a denotation well established in textbooks, technical
dictionaries, or standards documents.

A few obviously techspeak terms (names of operating systems,
languages, or documents) are listed when they are tied to hacker
folklore that isn't covered in formal sources, or sometimes to convey
critical historical background necessary to understand other entries
to which they are cross-referenced. Some other techspeak senses of
jargon words are listed in order to make the jargon senses clear;
where the text does not specify that a straight technical sense is
under discussion, these are marked with '[techspeak]' as an etymology.
Some entries have a primary sense marked this way, with subsequent
jargon meanings explained in terms of it.

We have also tried to indicate (where known) the apparent origins of
terms. The results are probably the least reliable information in the
lexicon, for several reasons. For one thing, it is well known that
many hackish usages have been independently reinvented multiple times,
even among the more obscure and intricate neologisms. It often seems
that the generative processes underlying hackish jargon formation have
an internal logic so powerful as to create substantial parallelism
across separate cultures and even in different languages! For
another, the networks tend to propagate innovations so quickly that

'first use' is often impossible to pin down. And, finally, compendia
like this one alter what they observe by implicitly stamping cultural
approval on terms and widening their use.

Despite these problems, the organized collection of jargon-related
oral history for the new compilations has enabled us to put to rest
quite a number of folk etymologies, place credit where credit is due,
and illuminate the early history of many important hackerisms such as

                kluge
                ,
                cruft
                , and
                foo
                . We believe specialist lexicographers
will find many of the historical notes more than casually instructive.

Revision History
==================

The original Jargon File was a collection of hacker jargon from
technical cultures including the MIT AI Lab, the Stanford AI lab
(SAIL), and others of the old ARPANET AI/LISP/PDP-10 communities
including Bolt, Beranek and Newman (BBN), Carnegie-Mellon University
(CMU), and Worcester Polytechnic Institute (WPI).

The Jargon File (hereafter referred to as 'jargon-1' or 'the File')
was begun by Raphael Finkel at Stanford in 1975. From this time until
the plug was finally pulled on the SAIL computer in 1991, the File was
named AIWORD.RF[UP,DOC] there. Some terms in it date back
considerably earlier (
                frob
                 and some senses of
                moby
                , for instance,
go back to the Tech Model Railroad Club at MIT and are believed to
date at least back to the early 1960s). The revisions of jargon-1
were all unnumbered and may be collectively considered 'Version 1'.

In 1976, Mark Crispin, having seen an announcement about the File on
the SAIL computer,
                FTP
                ed a copy of the File to MIT. He noticed that
it was hardly restricted to 'AI words' and so stored the file on his
directory as AI:MRC;SAIL JARGON.

The file was quickly renamed JARGON > (the '>' caused versioning under
ITS) as a flurry of enhancements were made by Mark Crispin and Guy L.
Steele Jr. Unfortunately, amidst all this activity, nobody thought of
correcting the term 'jargon' to 'slang' until the compendium had
already become widely known as the Jargon File.

Raphael Finkel dropped out of active participation shortly thereafter
and Don Woods became the SAIL contact for the File (which was
subsequently kept in duplicate at SAIL and MIT, with periodic
resynchronizations).

The File expanded by fits and starts until about 1983; Richard
Stallman was prominent among the contributors, adding many MIT and
ITS-related coinages.

In Spring 1981, a hacker named Charles Spurgeon got a large chunk of
the File published in Stewart Brand's "CoEvolution Quarterly" (issue
29, pages 26--35) with illustrations by Phil Wadler and Guy Steele
(including a couple of the Crunchly cartoons). This appears to have
been the File's first paper publication.

A late version of jargon-1, expanded with commentary for the mass
market, was edited by Guy Steele into a book published in 1983 as "The
Hacker's Dictionary" (Harper & Row CN 1082, ISBN 0-06-091082-8). The
other jargon-1 editors (Raphael Finkel, Don Woods, and Mark Crispin)
contributed to this revision, as did Richard M. Stallman and Geoff
Goodfellow. This book (now out of print) is hereafter referred to as
'Steele-1983' and those six as the Steele-1983 coauthors.

Shortly after the publication of Steele-1983, the File effectively
stopped growing and changing. Originally, this was due to a desire to
freeze the file temporarily to facilitate the production of
Steele-1983, but external conditions caused the 'temporary' freeze to
become permanent.

The AI Lab culture had been hit hard in the late 1970s by funding cuts
and the resulting administrative decision to use vendor-supported
hardware and software instead of homebrew whenever possible. At MIT,
most AI work had turned to dedicated LISP Machines. At the same time,
the commercialization of AI technology lured some of the AI Lab's best
and brightest away to startups along the Route 128 strip in
Massachusetts and out West in Silicon Valley. The startups built LISP
machines for MIT; the central MIT-AI computer became a
                TWENEX
                 system
rather than a host for the AI hackers' beloved
                ITS
                .

The Stanford AI Lab had effectively ceased to exist by 1980, although
the SAIL computer continued as a Computer Science Department resource
until 1991. Stanford became a major
                TWENEX
                 site, at one point
operating more than a dozen TOPS-20 systems; but by the mid-1980s most
of the interesting software work was being done on the emerging BSD
Unix standard.

In April 1983, the PDP-10-centered cultures that had nourished the
File were dealt a death-blow by the cancellation of the Jupiter
project at Digital Equipment Corporation. The File's compilers,
already dispersed, moved on to other things. Steele-1983 was partly a
monument to what its authors thought was a dying tradition; no one
involved realized at the time just how wide its influence was to be.

By the mid-1980s the File's content was dated, but the legend that had
grown up around it never quite died out. The book, and softcopies
obtained off the ARPANET, circulated even in cultures far removed from

MIT and Stanford; the content exerted a strong and continuing
influence on hackish language and humor. Even as the advent of the
microcomputer and other trends fueled a tremendous expansion of
hackerdom, the File (and related materials such as the

                    AI Koans
                     in
Appendix A) came to be seen as a sort of sacred epic, a hacker-culture
Matter of Britain chronicling the heroic exploits of the Knights of
the Lab. The pace of change in hackerdom at large accelerated
tremendously -- but the Jargon File, having passed from living
document to icon, remained essentially untouched for seven years.

This revision contains nearly the entire text of a late version of
jargon-1 (a few obsolete PDP-10-related entries were dropped after
careful consultation with the editors of Steele-1983). It merges in
about 80% of the Steele-1983 text, omitting some framing material and
a very few entries introduced in Steele-1983 that are now also
obsolete.

This new version casts a wider net than the old Jargon File; its aim
is to cover not just AI or PDP-10 hacker culture but all the technical
computing cultures wherein the true hacker-nature is manifested. More
than half of the entries now derive from

                    Usenet
                     and represent jargon
now current in the C and Unix communities, but special efforts have
been made to collect jargon from other cultures including IBM PC
programmers, Amiga fans, Mac enthusiasts, and even the IBM mainframe
world.

Eric S. Raymond <esr@snark.thyrsus.com> maintains the new File with
assistance from Guy L. Steele Jr. <gls@think.com>; these are the
persons primarily reflected in the File's editorial 'we', though we
take pleasure in acknowledging the special contribution of the other
coauthors of Steele-1983. Please email all additions, corrections,
and correspondence relating to the Jargon File to jargon@thyrsus.com.

(Warning: other email addresses appear in this file *but are not
guaranteed to be correct* later than the revision date on the first
line. *Don't* email us if an attempt to reach your idol bounces
--- we have no magic way of checking addresses or looking up people.)

The 2.9.6 version became the main text of "The New Hacker's
Dictionary", by Eric Raymond (ed.), MIT Press 1991, ISBN
0-262-68069-6.

The 3.0.0 version was published in September 1993 as the second
edition of "The New Hacker's Dictionary", again from MIT Press (ISBN
0-262-18154-1).

If you want the book, you should be able to find it at any of the
major bookstore chains. Failing that, you can order by mail from

        The MIT Press
        55 Hayward Street
        Cambridge, MA 02142

or order by phone at (800)-356-0343 or (617)-625-8481.

The maintainers are committed to updating the on-line version of the
Jargon File through and beyond paper publication, and will continue to
make it available to archives and public-access sites as a trust of
the hacker community.

Here is a chronology of the high points in the recent on-line
revisions:

Version 2.1.1, Jun 12 1990: the Jargon File comes alive again after a
seven-year hiatus. Reorganization and massive additions were by Eric
S. Raymond, approved by Guy Steele. Many items of UNIX, C, USENET,
and microcomputer-based jargon were added at that time.

Version 2.9.6, Aug 16 1991: corresponds to reproduction copy for book.
This version had 18952 lines, 148629 words, 975551 characters, and
1702 entries.

Version 2.9.8, Jan 01 1992: first public release since the book,
including over fifty new entries and numerous corrections/additions to
old ones. Packaged with version 1.1 of vh(1) hypertext reader. This
version had 19509 lines, 153108 words, 1006023 characters, and 1760
entries.

Version 2.9.9, Apr 01 1992: folded in XEROX PARC lexicon. This
version had 20298 lines, 159651 words, 1048909 characters, and 1821
entries.

Version 2.9.10, Jul 01 1992: lots of new historical material. This
version had 21349 lines, 168330 words, 1106991 characters, and 1891
entries.

Version 2.9.11, Jan 01 1993: lots of new historical material. This
version had 21725 lines, 171169 words, 1125880 characters, and 1922
entries.

Version 2.9.12, May 10 1993: a few new entries & changes, marginal
MUD/IRC slang and some borderline techspeak removed, all in
preparation for 2nd Edition of TNHD. This version had 22238 lines,
175114 words, 1152467 characters, and 1946 entries.

Version 3.0.0, Jul 27 1993: manuscript freeze for 2nd edition of TNHD.
This version had 22548 lines, 177520 words, 1169372 characters, and
1961 entries.

Version 3.1.0, Oct 15 1994: interim release to test WWW conversion.
This version had 23197 lines, 181001 words, 1193818 characters, and
1990 entries.

Version 3.2.0, Mar 15 1995: Spring 1995 update. This version had
23822 lines, 185961 words, 1226358 characters, and 2031 entries.

Version 3.3.0, Jan 20 1996: Winter 1996 update. This version had
24055 lines, 187957 words, 1239604 characters, and 2045 entries.

Version 3.3.1, Jan 25 1996: Copy-corrected improvement on 3.3.0
shipped to MIT Press as a step towards TNHD III. This version had
24147 lines, 188728 words, 1244554 characters, and 2050 entries.

Version numbering: Version numbers should be read as
major.minor.revision. Major version 1 is reserved for the 'old' (ITS)
Jargon File, jargon-1. Major version 2 encompasses revisions by ESR
(Eric S. Raymond) with assistance from GLS (Guy L. Steele, Jr.)
leading up to and including the second paper edition. From now on,
major version number N.00 will probably correspond to the Nth paper
edition. Usually later versions will either completely supersede or
incorporate earlier versions, so there is generally no point in
keeping old versions around.

Our thanks to the coauthors of Steele-1983 for oversight and
assistance, and to the hundreds of Usenetters (too many to name here)
who contributed entries and encouragement. More thanks go to several
of the old-timers on the Usenet group alt.folklore.computers, who
contributed much useful commentary and many corrections and valuable
historical perspective: Joseph M. Newcomer <jn11+@andrew.cmu.edu>,
Bernie Cosell <cosell@bbn.com>, Earl Boebert <boebert@SCTC.com>, and
Joe Morris <jcmorris@mwunix.mitre.org>.

We were fortunate enough to have the aid of some accomplished
linguists. David Stampe <stampe@hawaii.edu> and Charles Hoequist
<hoequist@bnr.ca> contributed valuable criticism; Joe Keane
<jgk@osc.osc.com> helped us improve the pronunciation guides.

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How Jargon Works
****

Jargon Construction
===================

There are some standard methods of jargonification that became
established quite early (i.e., before 1970), spreading from such
sources as the Tech Model Railroad Club, the PDP-1 SPACEWAR hackers,
and John McCarthy's original crew of LISPers. These include verb
doubling, soundalike slang, the '-P' convention, overgeneralization,
spoken inarticulations, and anthromorphization. Each is discussed
below. We also cover the standard comparatives for design quality.

Of these six, verb doubling, overgeneralization, anthromorphization,
and (especially) spoken inarticulations have become quite general; but
soundalike slang is still largely confined to MIT and other large
universities, and the '-P' convention is found only where LISPers
flourish.

Verb Doubling

A standard construction in English is to double a verb and use it as
an exclamation, such as "Bang, bang!" or "Quack, quack!". Most of
these are names for noises. Hackers also double verbs as a concise,
sometimes sarcastic comment on what the implied subject does. Also, a
doubled verb is often used to terminate a conversation, in the process
remarking on the current state of affairs or what the speaker intends
to do next. Typical examples involve
                win
                ,
                lose
                ,
                hack
                ,
                flame
                ,

                barf
                ,
                chomp
                :

    "The disk heads just crashed." "Lose, lose."
    "Mostly he talked about his latest crock. Flame, flame."
    "Boy, what a bagbiter! Chomp, chomp!"

Some verb-doubled constructions have special meanings not immediately
obvious from the verb. These have their own listings in the lexicon.

The
                Usenet

                        culture has one *tripling* convention unrelated to this;
the names of 'joke' topic groups often have a tripled last element.
The first and paradigmatic example was alt.swedish.chef.bork.bork.bork
(a "Muppet Show" reference); other infamous examples have included:

    alt.french.captain.borg.borg.borg
    alt.wesley.crusher.die.die.die
    comp.unix.internals.system.calls.brk.brk.brk
    sci.physics.edward.teller.boom.boom.boom
    alt.sadistic.dentists.drill.drill.drill

Soundalike slang

Hackers will often make rhymes or puns in order to convert an ordinary
word or phrase into something more interesting. It is considered
particularly
                flavorful
                 if the phrase is bent so as to include some
other jargon word; thus the computer hobbyist magazine "Dr. Dobb's
Journal" is almost always referred to among hackers as 'Dr. Frob's
Journal' or simply 'Dr. Frob's'. Terms of this kind that have been in
fairly wide use include names for newspapers:

        Boston Herald => Horrid (or Harried)
        Boston Globe => Boston Glob
        Houston (or San Francisco) Chronicle
            => the Crocknicle (or the Comical)
        New York Times => New York Slime

However, terms like these are often made up on the spur of the moment.
Standard examples include:

        Data General => Dirty Genitals
        IBM 360 => IBM Three-Sickly
        Government Property -- Do Not Duplicate (on keys)
            => Government Duplicity -- Do Not Propagate
        for historical reasons => for hysterical raisins
        Margaret Jacks Hall (the CS building at Stanford)
            => Marginal Hacks Hall

This is not really similar to the Cockney rhyming slang it has been
compared to in the past, because Cockney substitutions are opaque
whereas hacker punning jargon is intentionally transparent.

The '-P' convention

Turning a word into a question by appending the syllable 'P'; from the
LISP convention of appending the letter 'P' to denote a predicate (a
boolean-valued function). The question should expect a yes/no answer,
though it needn't. (See
                T
                 and
                NIL
                .)

```
        At dinnertime:
                Q: "Foodp?"
                A: "Yeah, I'm pretty hungry." or "T!"

        At any time:
                Q: "State-of-the-world-P?"
                A: (Straight) "I'm about to go home."
                A: (Humorous) "Yes, the world has a state."

        On the phone to Florida:
                Q: "State-p Florida?"
                A: "Been reading JARGON.TXT again, eh?"
```

[One of the best of these is a
                Gosperism
                . Once, when we were at a
Chinese restaurant, Bill Gosper wanted to know whether someone would
like to share with him a two-person-sized bowl of soup. His inquiry
was: "Split-p soup?" -- GLS]

Overgeneralization

A very conspicuous feature of jargon is the frequency with which
techspeak items such as names of program tools, command language
primitives, and even assembler opcodes are applied to contexts outside
of computing wherever hackers find amusing analogies to them. Thus
(to cite one of the best-known examples) Unix hackers often
                grep
                 for
things rather than searching for them. Many of the lexicon entries
are generalizations of exactly this kind.

Hackers enjoy overgeneralization on the grammatical level as well.
Many hackers love to take various words and add the wrong endings to
them to make nouns and verbs, often by extending a standard rule to
nonuniform cases (or vice versa). For example, because

```
    porous => porosity
    generous => generosity
```

hackers happily generalize:

```
    mysterious => mysteriosity
    ferrous => ferrosity
    obvious => obviosity
    dubious => dubiosity
```

Another class of common construction uses the suffix '-itude' to
abstract a quality from just about any adjective or noun. This usage
arises especially in cases where mainstream English would perform the
same abstraction through '-iness' or '-ingness'. Thus:

```
    win => winnitude (a common exclamation)
    loss => lossitude
    cruft => cruftitude
    lame => lameitude
```

Some hackers cheerfully reverse this transformation; they argue, for
example, that the horizontal degree lines on a globe ought to be
called 'lats' -- after all, they're measuring latitude!

Also, note that all nouns can be verbed. E.g.: "All nouns can be
verbed", "I'll mouse it up", "Hang on while I clipboard it over", "I'm
grepping the files". English as a whole is already heading in this
direction (towards pure-positional grammar like Chinese); hackers are
simply a bit ahead of the curve.

However, hackers avoid the unimaginative verb-making techniques
characteristic of marketroids, bean-counters, and the Pentagon; a
hacker would never, for example, 'productize', 'prioritize', or
'securitize' things. Hackers have a strong aversion to bureaucratic
bafflegab and regard those who use it with contempt.

Similarly, all verbs can be nouned. This is only a slight
overgeneralization in modern English; in hackish, however, it is good
form to mark them in some standard nonstandard way. Thus:

        win => winnitude, winnage
        disgust => disgustitude
        hack => hackification

Further, note the prevalence of certain kinds of nonstandard plural
forms. Some of these go back quite a ways; the TMRC Dictionary
includes an entry which implies that the plural of 'mouse' is

                meeces
                , and notes that the defined plural of 'caboose' is 'cabeese'.
This latter has apparently been standard (or at least a standard joke)
among railfans (railroad enthusiasts) for many years.

On a similarly Anglo-Saxon note, almost anything ending in 'x' may
form plurals in '-xen' (see
                VAXen
                 and
                boxen
                 in the main text).
Even words ending in phonetic /k/ alone are sometimes treated this
way; e.g., 'soxen' for a bunch of socks. Other funny plurals are
'frobbotzim' for the plural of 'frobbozz' (see
                frobnitz
) and
'Unices' and 'Twenices' (rather than 'Unixes' and 'Twenexes'; see

                Unix
                ,
                TWENEX
                 in main text). But note that 'Unixen' and 'Twenexen'
are never used; it has been suggested that this is because '-ix' and
'-ex' are Latin singular endings that attract a Latinate plural.
Finally, it has been suggested to general approval that the plural of
'mongoose' ought to be 'polygoose'.

The pattern here, as with other hackish grammatical quirks, is

generalization of an inflectional rule that in English is either an
import or a fossil (such as the Hebrew plural ending '-im', or the
Anglo-Saxon plural suffix '-en') to cases where it isn't normally
considered to apply.

This is not 'poor grammar', as hackers are generally quite well aware
of what they are doing when they distort the language. It is
grammatical creativity, a form of playfulness. It is done not to
impress but to amuse, and never at the expense of clarity.

Spoken inarticulations

Words such as 'mumble', 'sigh', and 'groan' are spoken in places where
their referent might more naturally be used. It has been suggested
that this usage derives from the impossibility of representing such
noises on a comm link or in electronic mail (interestingly, the same
sorts of constructions have been showing up with increasing frequency
in comic strips). Another expression sometimes heard is "Complain!",
meaning "I have a complaint!"

Anthromorphization

Semantically, one rich source of jargon constructions is the hackish
tendency to anthropomorphize hardware and software. This isn't done
in a naive way; hackers don't personalize their stuff in the sense of
feeling empathy with it, nor do they mystically believe that the
things they work on every day are 'alive'. What *is* common is to
hear hardware or software talked about as though it has homunculi
talking to each other inside it, with intentions and desires. Thus,
one hears "The protocol handler got confused", or that programs "are
trying" to do things, or one may say of a routine that "its goal in
life is to X". One even hears explanations like "... and its poor
little brain couldn't understand X, and it died." Sometimes modelling
things this way actually seems to make them easier to understand,
perhaps because it's instinctively natural to think of anything with a
really complex behavioral repertoire as 'like a person' rather than
'like a thing'.

Comparatives

Finally, note that many words in hacker jargon have to be understood
as members of sets of comparatives. This is especially true of the
adjectives and nouns used to describe the beauty and functional
quality of code. Here is an approximately correct spectrum:

    monstrosity brain-damage screw bug lose misfeature
    crock kluge hack win feature elegance perfection

The last is spoken of as a mythical absolute, approximated but never
actually attained. Another similar scale is used for describing the
reliability of software:

    broken flaky dodgy fragile brittle
    solid robust bulletproof armor-plated

Note, however, that 'dodgy' is primarily Commonwealth Hackish (it is
rare in the U.S.) and may change places with 'flaky' for some
speakers.

Coinages for describing
                lossage
                 seem to call forth the very finest
in hackish linguistic inventiveness; it has been truly said that
hackers have even more words for equipment failures than Yiddish has
for obnoxious people.

Hacker Writing Style
======================

We've already seen that hackers often coin jargon by overgeneralizing
grammatical rules. This is one aspect of a more general fondness for
form-versus-content language jokes that shows up particularly in
hackish writing. One correspondent reports that he consistently
misspells 'wrong' as 'worng'. Others have been known to criticize
glitches in Jargon File drafts by observing (in the mode of Douglas
Hofstadter) "This sentence no verb", or "Too repetetive", or "Bad
speling", or "Incorrectspa cing." Similarly, intentional spoonerisms
are often made of phrases relating to confusion or things that are
confusing; 'dain bramage' for 'brain damage' is perhaps the most
common (similarly, a hacker would be likely to write "Excuse me, I'm
cixelsyd today", rather than "I'm dyslexic today"). This sort of
thing is quite common and is enjoyed by all concerned.

Hackers tend to use quotes as balanced delimiters like parentheses,
much to the dismay of American editors. Thus, if "Jim is going" is a
phrase, and so are "Bill runs" and "Spock groks", then hackers
generally prefer to write: "Jim is going", "Bill runs", and "Spock
groks". This is incorrect according to standard American usage (which
would put the continuation commas and the final period inside the
string quotes); however, it is counter-intuitive to hackers to
mutilate literal strings with characters that don't belong in them.
Given the sorts of examples that can come up in discussions of
programming, American-style quoting can even be grossly misleading.
When communicating command lines or small pieces of code, extra
characters can be a real pain in the neck.

Consider, for example, a sentence in a
                vi
                 tutorial that looks like
this:

     Then delete a line from the file by typing "dd".

Standard usage would make this

     Then delete a line from the file by typing "dd."

but that would be very bad -- because the reader would be prone to
type the string d-d-dot, and it happens that in 'vi(1)' dot
repeats the last command accepted. The net result would be to delete
two lines!

The Jargon File follows hackish usage throughout.

Interestingly, a similar style is now preferred practice in Great
Britain, though the older style (which became established for
typographical reasons having to do with the aesthetics of comma and
quotes in typeset text) is still accepted there. "Hart's Rules" and
the "Oxford Dictionary for Writers and Editors" call the hacker-like
style 'new' or 'logical' quoting.

Another hacker habit is a tendency to distinguish between 'scare'
quotes and 'speech' quotes; that is, to use British-style single
quotes for marking and reserve American-style double quotes for actual
reports of speech or text included from elsewhere. Interestingly,
some authorities describe this as correct general usage, but
mainstream American English has gone to using double-quotes
indiscriminately enough that hacker usage appears marked [and, in
fact, I thought this was a personal quirk of mine until I checked with
Usenet -- ESR]. One further permutation that is definitely
not standard is a hackish tendency to do marking quotes by
using apostrophes (single quotes) in pairs; that is, 'like this'.
This is modelled on string and character literal syntax in some
programming languages (reinforced by the fact that many character-only
terminals display the apostrophe in typewriter style, as a vertical
single quote).

One quirk that shows up frequently in the
                email
                 style of Unix
hackers in particular is a tendency for some things that are normally
all-lowercase (including usernames and the names of commands and C
routines) to remain uncapitalized even when they occur at the
beginning of sentences. It is clear that, for many hackers, the case
of such identifiers becomes a part of their internal representation
(the 'spelling') and cannot be overridden without mental effort (an
appropriate reflex because Unix and C both distinguish cases and
confusing them can lead to
                lossage
). A way of escaping this dilemma
is simply to avoid using these constructions at the beginning of
sentences.

There seems to be a meta-rule behind these nonstandard hackerisms to
the effect that precision of expression is more important than
conformance to traditional rules; where the latter create ambiguity or
lose information they can be discarded without a second thought. It
is notable in this respect that other hackish inventions (for example,
in vocabulary) also tend to carry very precise shades of meaning even
when constructed to appear slangy and loose. In fact, to a hacker,
the contrast between 'loose' form and 'tight' content in jargon is a
substantial part of its humor!

Hackers have also developed a number of punctuation and emphasis
conventions adapted to single-font all-ASCII communications links, and
these are occasionally carried over into written documents even when
normal means of font changes, underlining, and the like are available.

One of these is that TEXT IN ALL CAPS IS INTERPRETED AS 'LOUD', and
this becomes such an ingrained synesthetic reflex that a person who
goes to caps-lock while in
                  talk mode
                   may be asked to "stop shouting,
please, you're hurting my ears!".

Also, it is common to use bracketing with unusual characters to
signify emphasis. The asterisk is most common, as in "What the
hell?" even though this interferes with the common use of the
asterisk suffix as a footnote mark. The underscore is also common,
suggesting underlining (this is particularly common with book titles;
for example, "It is often alleged that Joe Haldeman wrote
_The_Forever_War_ as a rebuttal to Robert Heinlein's earlier novel of
the future military, _Starship_Troopers_."). Other forms exemplified
by "=hell=", "\hell/", or "/hell/" are occasionally seen (it's claimed
that in the last example the first slash pushes the letters over to
the right to make them italic, and the second keeps them from falling
over). Finally, words may also be emphasized L I K E T H I S, or by a
series of carets (^) under them on the next line of the text.

There is a semantic difference between *emphasis like this* (which
emphasizes the phrase as a whole), and *emphasis* *like* *this* (which
suggests the writer speaking very slowly and distinctly, as if to a
very young child or a mentally impaired person). Bracketing a word
with the '*' character may also indicate that the writer wishes
readers to consider that an action is taking place or that a sound is
being made. Examples: *bang*, *hic*, *ring*, *grin*, *kick*, *stomp*,
mumble.

One might also see the above sound effects as <bang>, <hic>, <ring>,
<grin>, <kick>, <stomp>, <mumble>. This use of angle brackets to mark
their contents originally derives from conventions used in
                  BNF
                  . but
since about 1993 it has been reinforced by the HTML markup used on the
World Wide Web.

Angle-bracket enclosure is also used to indicate that a term stands
for some
                  random
                   member of a larger class (this is straight from

                  BNF
). Examples like the following are common:

    So this <ethnic> walks into a bar one day...

There is also an accepted convention for 'writing under erasure'; the
text

    Be nice to this fool^H^H^H^Hgentleman,
    he's visiting from corporate HQ.

reads roughly as "Be nice to this fool, er, gentleman...". This comes
from the fact that the digraph ^H is often used as a print
representation for a backspace. It parallels (and may have been

influenced by) the ironic use of 'slashouts' in science-fiction
fanzines.

A related habit uses editor commands to signify corrections to
previous text. This custom is fading as more mailers get good editing
capabilities, but one occasionally still sees things like this:

        I've seen that term used on alt.foobar often.
        Send it to Erik for the File. Oops...s/Erik/Eric/.

The s/Erik/Eric/ says "change Erik to Eric in the preceding". This
syntax is borrowed from the Unix editing tools 'ed' and 'sed', but is
widely recognized by non-Unix hackers as well.

In a formula, '*' signifies multiplication but two asterisks in a row
are a shorthand for exponentiation (this derives from FORTRAN). Thus,
one might write 2 ** 8 = 256.

Another notation for exponentiation one sees more frequently uses the
caret (^, ASCII 1011110); one might write instead '2^8 = 256'. This
goes all the way back to Algol-60, which used the archaic ASCII
'up-arrow' that later became the caret; this was picked up by Kemeny
and Kurtz's original BASIC, which in turn influenced the design of the
'bc(1)' and 'dc(1)' Unix tools, which have probably done most to
reinforce the convention on Usenet. The notation is mildly confusing
to C programmers, because '^' means bitwise exclusive-or in C.
Despite this, it was favored 3:1 over ** in a late-1990 snapshot of
Usenet. It is used consistently in this lexicon.

In on-line exchanges, hackers tend to use decimal forms or improper
fractions ('3.5' or '7/2') rather than 'typewriter style' mixed
fractions ('3-1/2'). The major motive here is probably that the
former are more readable in a monospaced font, together with a desire
to avoid the risk that the latter might be read as 'three minus
one-half'. The decimal form is definitely preferred for fractions
with a terminating decimal representation; there may be some cultural
influence here from the high status of scientific notation.

Another on-line convention, used especially for very large or very
small numbers, is taken from C (which derived it from FORTRAN). This
is a form of 'scientific notation' using 'e' to replace '*10^'; for
example, one year is about 3e7 seconds long.

The tilde (~) is commonly used in a quantifying sense of
'approximately'; that is, '~50' means 'about fifty'.

On Usenet and in the
                MUD
                world, common C boolean, logical, and
relational operators such as '|', '&', '||', '&&', '!', '==', '!=',
'>', '<', '>=', and '=<' are often combined with English. The Pascal
not-equals, '<>', is also recognized, and occasionally one sees '/='
for not-equals (from Ada, Common Lisp, and Fortran 90). The use of
prefix '!' as a loose synonym for 'not-' or 'no-' is particularly
common; thus, '!clue' is read 'no-clue' or 'clueless'.

A related practice borrows syntax from preferred programming languages

to express ideas in a natural-language text. For example, one might
see the following:

```
    In <jrh578689@thudpucker.com> J. R. Hacker wrote:
    >I recently had occasion to field-test the Snafu
    >Systems 2300E adaptive gonkulator.  The price was
    >right, and the racing stripe on the case looked
    >kind of neat, but its performance left something
    >to be desired.

    Yeah, I tried one out too.

    #ifdef FLAME
    Hasn't anyone told those idiots that you can't get
    decent bogon suppression with AFJ filters at today's
    net volumes?
    #endif /* FLAME */

    I guess they figured the price premium for true
    frame-based semantic analysis was too high.
    Unfortunately, it's also the only workable approach.
    I wouldn't recommend purchase of this product unless
    you're on a *very* tight budget.

    #include <disclaimer.h>
    --
                    == Frank Foonly (Fubarco Systems)
```

In the above, the '#ifdef'/'#endif' pair is a conditional compilation
syntax from C; here, it implies that the text between (which is a

```
                flame
```
) should be evaluated only if you have turned on (or defined
on) the switch FLAME. The '#include' at the end is C for "include
standard disclaimer here"; the 'standard disclaimer' is understood to
read, roughly, "These are my personal opinions and not to be construed
as the official position of my employer."

The top section in the example, with > at the left margin, is an
example of an inclusion convention we'll discuss below.

More recently, following on the huge popularity of the World Wide Web,
pseudo-HTML markup has become popular for similar purposes:

```
    <flame>
    The flame goes here.
    </flame>
```

You'll even see this with an HTML-style modifier:

```
    <flame intensity=100%>
    This is an extremely hot flame.
    </flame>
```

Hackers also mix letters and numbers more freely than in mainstream
usage. In particular, it is good hackish style to write a digit

sequence where you intend the reader to understand the text string
that names that number in English. So, hackers prefer to write
'1970s' rather than 'nineteen-seventies' or '1970's' (the latter looks
like a possessive).

It should also be noted that hackers exhibit much less reluctance to
use multiply nested parentheses than is normal in English. Part of
this is almost certainly due to influence from LISP (which uses deeply
nested parentheses (like this (see?)) in its syntax a lot), but it has
also been suggested that a more basic hacker trait of enjoying playing
with complexity and pushing systems to their limits is in operation.

Finally, it is worth mentioning that many studies of on-line
communication have shown that electronic links have a de-inhibiting
effect on people. Deprived of the body-language cues through which
emotional state is expressed, people tend to forget everything about
other parties except what is presented over that ASCII link. This has
both good and bad effects. A good one is that it encourages honesty
and tends to break down hierarchical authority relationships; a bad
one is that it may encourage depersonalization and gratuitous
rudeness. Perhaps in response to this, experienced netters often
display a sort of conscious formal politesse in their writing that has
passed out of fashion in other spoken and written media (for example,
the phrase "Well said, sir!" is not uncommon).

Many introverted hackers who are next to inarticulate in person
communicate with considerable fluency over the net, perhaps precisely
because they can forget on an unconscious level that they are dealing
with people and thus don't feel stressed and anxious as they would
face to face.

Though it is considered gauche to publicly criticize posters for poor
spelling or grammar, the network places a premium on literacy and
clarity of expression. It may well be that future historians of
literature will see in it a revival of the great tradition of personal
letters as art.

Email Quotes and Inclusion Conventions
=======================================

One area where hackish conventions for on-line writing are still in
some flux is the marking of included material from earlier messages
--- what would be called 'block quotations' in ordinary English. From
the usual typographic convention employed for these (smaller font at
an extra indent), there derived the notation of included text being
indented by one ASCII TAB (0001001) character, which under Unix and
many other environments gives the appearance of an 8-space indent.

Early mail and netnews readers had no facility for including messages
this way, so people had to paste in copy manually. BSD 'Mail(1)' was
the first message agent to support inclusion, and early Usenetters
emulated its style. But the TAB character tended to push included
text too far to the right (especially in multiply nested inclusions),
leading to ugly wraparounds. After a brief period of confusion
(during which an inclusion leader consisting of three or four spaces
became established in EMACS and a few mailers), the use of leading '>'
or '> ' became standard, perhaps owing to its use in 'ed(1)' to

display tabs (alternatively, it may derive from the '>' that some
early Unix mailers used to quote lines starting with "From" in text,
so they wouldn't look like the beginnings of new message headers).
Inclusions within inclusions keep their '>' leaders, so the 'nesting
level' of a quotation is visually apparent.

The practice of including text from the parent article when posting a
followup helped solve what had been a major nuisance on Usenet: the
fact that articles do not arrive at different sites in the same order.
Careless posters used to post articles that would begin with, or even
consist entirely of, "No, that's wrong" or "I agree" or the like.
It was hard to see who was responding to what. Consequently, around
1984, new news-posting software evolved a facility to automatically
include the text of a previous article, marked with "> " or whatever
the poster chose. The poster was expected to delete all but the
relevant lines. The result has been that, now, careless posters post
articles containing the *entire* text of a preceding article,
followed only by "No, that's wrong" or "I agree".

Many people feel that this cure is worse than the original disease,
and there soon appeared newsreader software designed to let the reader
skip over included text if desired. Today, some posting software
rejects articles containing too high a proportion of lines beginning
with '>' -- but this too has led to undesirable workarounds, such as
the deliberate inclusion of zero-content filler lines which aren't
quoted and thus pull the message below the rejection threshold.

Because the default mailers supplied with Unix and other operating
systems haven't evolved as quickly as human usage, the older
conventions using a leading TAB or three or four spaces are still
alive; however, >-inclusion is now clearly the prevalent form in both
netnews and mail.

In 1991 practice is still evolving, and disputes over the 'correct'
inclusion style occasionally lead to
                    holy wars
                    . One variant
style reported uses the citation character '|' in place of '>' for
extended quotations where original variations in indentation are being
retained. One also sees different styles of quoting a number of
authors in the same message: one (deprecated because it loses
information) uses a leader of '> ' for everyone, another (the most
common) is '> > > > ', '> > > ', etc. (or '>>>> ',
'>>> ', etc., depending on line length and nesting depth)
reflecting the original order of messages, and yet another is to use a
different citation leader for each author, say '> ', ': ', '| ', '} '
(preserving nesting so that the inclusion order of messages is still
apparent, or tagging the inclusions with authors' names). Yet
another style is to use each poster's initials (or login name)
as a citation leader for that poster. Occasionally one sees a '# '
leader used for quotations from authoritative sources such as
standards documents; the intended allusion is to the root prompt (the
special Unix command prompt issued when one is running as the
privileged super-user).

Hacker Speech Style

=====================

Hackish speech generally features extremely precise diction, careful
word choice, a relatively large working vocabulary, and relatively
little use of contractions or street slang. Dry humor, irony, puns,
and a mildly flippant attitude are highly valued -- but an underlying
seriousness and intelligence are essential. One should use just
enough jargon to communicate precisely and identify oneself as a
member of the culture; overuse of jargon or a breathless, excessively
gung-ho attitude is considered tacky and the mark of a loser.

This speech style is a variety of the precisionist English normally
spoken by scientists, design engineers, and academics in technical
fields. In contrast with the methods of jargon construction, it is
fairly constant throughout hackerdom.

It has been observed that many hackers are confused by negative
questions -- or, at least, that the people to whom they are talking
are often confused by the sense of their answers. The problem is that
they have done so much programming that distinguishes between

        if (going) ...

and

        if (!going) ...

that when they parse the question "Aren't you going?" it seems to be
asking the opposite question from "Are you going?", and so merits an
answer in the opposite sense. This confuses English-speaking
non-hackers because they were taught to answer as though the negative
part weren't there. In some other languages (including Russian,
Chinese, and Japanese) the hackish interpretation is standard and the
problem wouldn't arise. Hackers often find themselves wishing for a
word like French 'si' or German 'doch' with which one could
unambiguously answer 'yes' to a negative question.

For similar reasons, English-speaking hackers almost never use double
negatives, even if they live in a region where colloquial usage allows
them. The thought of uttering something that logically ought to be an
affirmative knowing it will be misparsed as a negative tends to
disturb them.

In a related vein, hackers sometimes make a game of answering
questions containing logical connectives with a strictly literal
rather than colloquial interpretation. A non-hacker who is indelicate
enough to ask a question like "So, are you working on finding that bug
now or leaving it until later?" is likely to get the perfectly
correct answer "Yes!" (that is, "Yes, I'm doing it either now or
later, and you didn't ask which!").

International Style
=====================

Although the Jargon File remains primarily a lexicon of hacker usage
in American English, we have made some effort to get input from
abroad. Though the hacker-speak of other languages often uses

translations of jargon from English (often as transmitted to them by
earlier Jargon File versions!), the local variations are interesting,
and knowledge of them may be of some use to travelling hackers.

There are some references herein to 'Commonwealth hackish'. These are
intended to describe some variations in hacker usage as reported in
the English spoken in Great Britain and the Commonwealth (Canada,
Australia, India, etc. -- though Canada is heavily influenced by
American usage). There is also an entry on
                Commonwealth Hackish
                reporting some general phonetic and vocabulary differences from
U.S. hackish.

Hackers in Western Europe and (especially) Scandinavia report that
they often use a mixture of English and their native languages for
technical conversation. Occasionally they develop idioms in their
English usage that are influenced by their native-language styles.
Some of these are reported here.

On the other hand, English often gives rise to grammatical and
vocabulary mutations in the native language. For example, Italian
hackers often use the nonexistent verbs 'scrollare' (to scroll) and
'deletare' (to delete) rather than native Italian 'scorerre' and
'cancellare'. Similarly, the English verb 'to hack' has been seen
conjugated in Swedish. European hackers report that this happens
partly because the English terms make finer distinctions than are
available in their native vocabularies, and partly because deliberate
language-crossing makes for amusing wordplay.

A few notes on hackish usages in Russian have been added where they
are parallel with English idioms and thus comprehensible to
English-speakers.

From the late 1980s onward, a flourishing culture of local,
MS-DOS-based bulletin boards has been developing separately from
Internet hackerdom. The BBS culture has, as its seamy underside, a
stratum of 'pirate boards' inhabited by
                cracker
                s, phone phreaks, and

                warez d00dz
                . These people (mostly teenagers running PC-clones from
their bedrooms) have developed their own characteristic jargon,
heavily influenced by skateboard lingo and underground-rock slang.

Though crackers often call themselves 'hackers', they aren't (they
typically have neither significant programming ability, nor Internet
expertise, nor experience with UNIX or other true multi-user systems).
Their vocabulary has little overlap with hackerdom's. Nevertheless,
this lexicon covers much of it so the reader will be able to
understand what goes by on bulletin-board systems.

Here is a brief guide to cracker and
                warez d00dz
                 usage:

   * Misspell frequently. The substitutions

```
                       phone => fone
                       freak => phreak
```

  are obligatory.
  * Always substitute 'z's for 's's. (i.e. "codes" -> "codez").
  * Type random emphasis characters after a post line (i.e. "Hey
   Dudes!#!$#$!#!$").
  * Use the emphatic 'k' prefix ("k-kool", "k-rad", "k-awesome")
   frequently.
  * Abbreviate compulsively ("I got lotsa warez w/ docs").
  * Substitute '0' for 'o' ("r0dent", "l0zer").
  * TYPE ALL IN CAPS LOCK, SO IT LOOKS LIKE YOU'RE YELLING ALL THE
   TIME.

These traits are similar to those of
     B1FF
     , who originated as a
parody of naive BBS users. For further discussion of the pirate-board
subculture, see
     lamer
     ,
     elite
     ,
     leech
     ,
     poser
     ,
     cracker
     , and
especially
     warez d00dz
     .

How to Use the Lexicon
****

Pronunciation Guide
===================

Pronunciation keys are provided in the jargon listings for all entries
that are neither dictionary words pronounced as in standard English
nor obvious compounds thereof. Slashes bracket phonetic
pronunciations, which are to be interpreted using the following
conventions:

 1. Syllables are hyphen-separated, except that an accent or
  back-accent follows each accented syllable (the back-accent marks
  a secondary accent in some words of four or more syllables). If
  no accent is given, the word is pronounced with equal
  accentuation on all syllables (this is common for abbreviations).

 2. Consonants are pronounced as in American English. The letter 'g'
  is always hard (as in "got" rather than "giant"); 'ch' is soft
  ("church" rather than "chemist"). The letter 'j' is the sound
  that occurs twice in "judge". The letter 's' is always as in
  "pass", never a z sound. The digraph 'kh' is the guttural of

"loch" or "l'chaim". The digraph 'gh' is the aspirated g+h of
"bughouse" or "ragheap" (rare in English).

  3. Uppercase letters are pronounced as their English letter names;
     thus (for example) /H-L-L/ is equivalent to /aych el el/. /Z/
     may be pronounced /zee/ or /zed/ depending on your local dialect.

  4. Vowels are represented as follows:

     a
             back, that
     ah
             father, palm (see note)
     ar
             far, mark
     aw
             flaw, caught
     ay
             bake, rain
     e
             less, men
     ee
             easy, ski
     eir
             their, software
     i
             trip, hit
     i:
             life, sky
     o
             block, stock (see note)
     oh
             flow, sew
     oo
             loot, through
     or
             more, door
     ow
             out, how
     oy
             boy, coin
     uh
             but, some
     u
             put, foot
     y
             yet, young
     yoo
             few, chew
     [y]oo
             /oo/ with optional fronting as in 'news' (/nooz/ or
         /nyooz/)

A /*/ is used for the 'schwa' sound of unstressed or occluded vowels
(the one that is often written with an upside-down 'e'). The schwa
vowel is omitted in syllables containing vocalic r, l, m or n; that
is, 'kitten' and 'color' would be rendered /kit'n/ and /kuhl'r/, not

/kit'*n/ and /kuhl'*r/.

Note that the above table reflects mainly distinctions found in
standard American English (that is, the neutral dialect spoken by TV
network announcers and typical of educated speech in the Upper
Midwest, Chicago, Minneapolis/St.Paul and Philadelphia). However, we
separate /o/ from /ah/, which tend to merge in standard American.
This may help readers accustomed to accents resembling British
Received Pronunciation.

The intent of this scheme is to permit as many readers as possible to
map the pronunciations into their local dialect by ignoring some
subset of the distinctions we make. Speakers of British RP, for
example, can smash terminal /r/ and all unstressed vowels. Speakers
of many varieties of southern American will automatically map /o/ to
/aw/; and so forth. (Standard American makes a good reference dialect
for this purpose because it has crisp consonents and more vowel
distinctions than other major dialects, and tends to retain
distinctions between unstressed vowels. It also happens to be what
your editor speaks.)

Entries with a pronunciation of '//' are written-only usages. (No,
Unix weenies, this does *not* mean 'pronounce like previous
pronunciation'!)

Other Lexicon Conventions
==========================

Entries are sorted in case-blind ASCII collation order (rather than
the letter-by-letter order ignoring interword spacing common in
mainstream dictionaries), except that all entries beginning with
nonalphabetic characters are sorted after Z. The case-blindness is a
feature, not a bug.

The beginning of each entry is marked by a colon (':') at the left
margin. This convention helps out tools like hypertext browsers that
benefit from knowing where entry boundaries are, but aren't as
context-sensitive as humans.

In pure ASCII renderings of the Jargon File, you will see {} used to
bracket words which themselves have entries in the File. This isn't
done all the time for every such word, but it is done everywhere that
a reminder seems useful that the term has a jargon meaning and one
might wish to refer to its entry.

In this all-ASCII version, headwords for topic entries are
distinguished from those for ordinary entries by being followed by
"::" rather than ":"; similarly, references are surrounded by "{{" and
"}}" rather than "{" and "}".

Defining instances of terms and phrases appear in 'slanted type'. A
defining instance is one which occurs near to or as part of an
explanation of it.

Prefix ** is used as linguists do; to mark examples of incorrect
usage.

We follow the 'logical' quoting convention described in the Writing
Style section above. In addition, we reserve double quotes for actual
excerpts of text or (sometimes invented) speech. Scare quotes (which
mark a word being used in a nonstandard way), and philosopher's quotes
(which turn an utterance into the string of letters or words that name
it) are both rendered with single quotes.

References such as 'malloc(3)' and 'patch(1)' are to Unix facilities
(some of which, such as 'patch(1)', are actually freeware distributed
over Usenet). The Unix manuals use 'foo(n)' to refer to item foo in
section (n) of the manual, where n=1 is utilities, n=2 is system
calls, n=3 is C library routines, n=6 is games, and n=8 (where
present) is system administration utilities. Sections 4, 5, and 7 of
the manuals have changed roles frequently and in any case are not
referred to in any of the entries.

Various abbreviations used frequently in the lexicon are summarized
here:

abbrev.
      abbreviation
adj.
      adjective
adv.
      adverb
alt.
      alternate
cav.
      caveat
conj.
      conjunction
esp.
      especially
excl.
      exclamation
imp.
      imperative
interj.
      interjection
n.
      noun
obs.
      obsolete
pl.
      plural
poss.
      possibly
pref.
      prefix
prob.
      probably
prov.
      proverbial
quant.
      quantifier
suff.
      suffix

syn.
     synonym (or synonymous with)
v.
     verb (may be transitive or intransitive)
var.
     variant
vi.
     intransitive verb
vt.
     transitive verb

Where alternate spellings or pronunciations are given, alt. separates
two possibilities with nearly equal distribution, while var. prefixes
one that is markedly less common than the primary.

Where a term can be attributed to a particular subculture or is known
to have originated there, we have tried to so indicate. Here is a
list of abbreviations used in etymologies:

Amateur Packet Radio
     A technical culture of ham-radio sites using AX.25 and TCP/IP for
     wide-area networking and BBS systems.
Berkeley
     University of California at Berkeley
BBN
     Bolt, Beranek & Newman
Cambridge
     the university in England (*not* the city in Massachusetts where
     MIT happens to be located!)
CMU
     Carnegie-Mellon University
Commodore
     Commodore Business Machines
DEC
     The Digital Equipment Corporation
Fairchild
     The Fairchild Instruments Palo Alto development group
FidoNet
     See the
               FidoNet
                entry
IBM
     International Business Machines
MIT
     Massachusetts Institute of Technology; esp. the legendary MIT AI
     Lab culture of roughly 1971 to 1983 and its feeder groups,
     including the Tech Model Railroad Club
NRL
     Naval Research Laboratories
NYU
     New York University
OED
     The Oxford English Dictionary
Purdue
     Purdue University
SAIL
     Stanford Artificial Intelligence Laboratory (at Stanford

```
     University)
SI
     From Syst'eme International, the name for the standard
     conventions of metric nomenclature used in the sciences
Stanford
     Stanford University
Sun
     Sun Microsystems
TMRC
     Some MITisms go back as far as the Tech Model Railroad Club
     (TMRC) at MIT c. 1960.  Material marked TMRC is from "An Abridged
     Dictionary of the TMRC Language", originally compiled by Pete
     Samson in 1959
UCLA
     University of California at Los Angeles
UK
     the United Kingdom (England, Wales, Scotland, Northern Ireland)
Usenet
     See the
                    Usenet
                     entry
WPI
     Worcester Polytechnic Institute, site of a very active community
     of PDP-10 hackers during the 1970s
WWW
     The World-Wide-Web.
XEROX PARC
     XEROX's Palo Alto Research Center, site of much pioneering
     research in user interface design and networking
Yale
     Yale University


Some other etymology abbreviations such as
                    Unix
                     and
                    PDP-10
                     refer
to technical cultures surrounding specific operating systems,
processors, or other environments.  The fact that a term is labelled
with any one of these abbreviations does not necessarily mean its use
is confined to that culture.  In particular, many terms labelled 'MIT'
and 'Stanford' are in quite general use.  We have tried to give some
indication of the distribution of speakers in the usage notes;
however, a number of factors mentioned in the introduction conspire to
make these indications less definite than might be desirable.

A few new definitions attached to entries are marked [proposed].
These are usually generalizations suggested by editors or Usenet
respondents in the process of commenting on previous definitions of
those entries.  These are *not* represented as established jargon.

Format For New Entries
======================


All contributions and suggestions about the Jargon File will be
considered donations to be placed in the public domain as part of this
File, and may be used in subsequent paper editions.  Submissions may
```

be edited for accuracy, clarity and concision.

Try to conform to the format already being used in the ASCII on-line version
--- head-words separated from text by a colon (double colon for topic
entries), cross-references in curly brackets (doubled for topic
entries), pronunciations in slashes, etymologies in square brackets,
single-space after definition numbers and word classes, etc. Stick to
the standard ASCII character set (7-bit printable, no high-half
characters or [nt]roff/TeX/Scribe escapes), as one of the versions
generated from the master file is an info document that has to be
viewable on a character tty.

We are looking to expand the File's range of technical specialties
covered. There are doubtless rich veins of jargon yet untapped in the
scientific computing, graphics, and networking hacker communities;
also in numerical analysis, computer architectures and VLSI design,
language design, and many other related fields. Send us your jargon!

We are *not* interested in straight technical terms explained by
textbooks or technical dictionaries unless an entry illuminates
'underground' meanings or aspects not covered by official histories.
We are also not interested in 'joke' entries -- there is a lot of
humor in the file but it must flow naturally out of the explanations
of what hackers do and how they think.

It is OK to submit items of jargon you have originated if they have
spread to the point of being used by people who are not personally
acquainted with you. We prefer items to be attested by independent
submission from two different sites.

There is now an HTML version of the File available at
//www.ccil.org/jargon. Please send us URLs for materials related to
the entries, so we can enrich the File's link structure.

The Jargon File will be regularly maintained and made available for
FTP over Internet, and will include a version number. Read it, pass
it around, contribute -- this is *your* monument!
The Jargon Lexicon
****

1.6 A

                abbrev /*-breev'/, /*-brev'/ n. Common abbreviation for
    'abbreviation'.

ABEND /o'bend/, /*-bend'/ n. [ABnormal END] Abnormal
    termination (of software);
                crash
                ;
                lossage
                . Derives from
    an error message on the IBM 360; used jokingly by hackers but
    seriously mainly by
                code grinder

s.   Usually capitalized, but
may appear as 'abend'. Hackers will try to persuade you that
ABEND is called 'abend' because it is what system operators do to
the machine late on Friday when they want to call it a day, and
hence is from the German 'Abend' = 'Evening'.

accumulator n. 1. Archaic term for a register. On-line use
of it as a synonym for 'register' is a fairly reliable
indication that the user has been around for quite a while and/or
that the architecture under discussion is quite old. The term in
full is almost never used of microprocessor registers, for example,
though symbolic names for arithmetic registers beginning in 'A'
derive from historical use of the term 'accumulator' (and not,
actually, from 'arithmetic'). Confusingly, though, an 'A'
register name prefix may also stand for 'address', as for
example on the Motorola 680x0 family. 2. A register being used for
arithmetic or logic (as opposed to addressing or a loop index),
especially one being used to accumulate a sum or count of many
items. This use is in context of a particular routine or stretch
of code. "The FOOBAZ routine uses A3 as an accumulator."
3. One's in-basket (esp. among old-timers who might use sense 1).
"You want this reviewed? Sure, just put it in the accumulator."
(See

        stack
        .)

ACK /ak/ interj. 1. [from the ASCII mnemonic for 0000110]
Acknowledge. Used to register one's presence (compare mainstream
Yo!). An appropriate response to

        ping
         or
        ENQ

        .
2. [from the comic strip "Bloom County"] An exclamation of
surprised disgust, esp. in "Ack pffft!" Semi-humorous.
Generally this sense is not spelled in caps (ACK) and is
distinguished by a following exclamation point. 3. Used to
politely interrupt someone to tell them you understand their point
(see

        NAK
). Thus, for example, you might cut off an overly
long explanation with "Ack. Ack. Ack. I get it now".

There is also a usage "ACK?" (from sense 1) meaning "Are you
there?", often used in email when earlier mail has produced no
reply, or during a lull in

        talk mode
         to see if the person has
gone away (the standard humorous response is of course

        NAK
            (sense 2), i.e., "I'm not here").

Acme n. The canonical supplier of bizarre, elaborate, and
non-functional gadgetry -- where Rube Goldberg and Heath Robinson
shop. Describing some X as an "Acme X" either means "This is

        insanely great

", or, more likely, "This looks
insanely great
   on paper, but in practice it's really easy to shoot yourself
in the foot with it." Compare
pistol
.

   This term, specially cherished by American hackers and explained
   here for the benefit of our overseas brethren, comes from the
   Warner Brothers' series of "Roadrunner" cartoons. In these
   cartoons, the famished Wile E. Coyote was forever attempting to
   catch up with, trap, and eat the Roadrunner. His attempts usually
   involved one or more high-technology Rube Goldberg devices --
   rocket jetpacks, catapults, magnetic traps, high-powered
   slingshots, etc. These were usually delivered in large cardboard
   boxes, labeled prominently with the Acme name. These devices
   invariably malfunctioned in violent and improbable ways.

acolyte n.,obs. [TMRC] An
               OSU
                privileged enough to
   submit data and programs to a member of the
               priesthood
               .

ad-hockery /ad-hok'*r-ee/ n. [Purdue] 1. Gratuitous
   assumptions made inside certain programs, esp. expert systems,
   which lead to the appearance of semi-intelligent behavior but are
   in fact entirely arbitrary. For example, fuzzy-matching against
   input tokens that might be typing errors against a symbol table can
   make it look as though a program knows how to spell.
   2. Special-case code to cope with some awkward input that would
   otherwise cause a program to
               choke
               , presuming normal inputs
   are dealt with in some cleaner and more regular way. Also called
   'ad-hackery', 'ad-hocity' (/ad-hos'*-tee/), 'ad-crockery'.
   See also
               ELIZA effect
               .

Ada n. A
               Pascal
               -descended language that has been made
   mandatory for Department of Defense software projects by the
   Pentagon. Hackers are nearly unanimous in observing that,
   technically, it is precisely what one might expect given that kind
   of endorsement by fiat; designed by committee, crockish, difficult
   to use, and overall a disastrous, multi-billion-dollar boondoggle
   (one common description is "The PL/I of the 1980s"). Hackers
   find Ada's exception-handling and inter-process communication
   features particularly hilarious. Ada Lovelace (the daughter of
   Lord Byron who became the world's first programmer while
   cooperating with Charles Babbage on the design of his mechanical
   computing engines in the mid-1800s) would almost certainly blanch
   at the use to which her name has latterly been put; the kindest
   thing that has been said about it is that there is probably a good

small language screaming to get out from inside its vast,

                elephantine
                 bulk.

adger /aj'r/ vt.   [UCLA mutant of
                nadger
                ] To make a
   bonehead move with consequences that could have been foreseen with
   even slight mental effort. E.g., "He started removing files and
   promptly adgered the whole project". Compare
                dumbass attack
                .

admin /ad-min'/ n. Short for 'administrator'; very
   commonly used in speech or on-line to refer to the systems person
   in charge on a computer. Common constructions on this include
   'sysadmin' and 'site admin' (emphasizing the administrator's
   role as a site contact for email and news) or 'newsadmin'
   (focusing specifically on news). Compare
                postmaster
                ,
                sysop
                ,
                system mangler
                .

ADVENT /ad'vent/ n. The prototypical computer adventure
   game, first designed by Will Crowther on the
                PDP-10
                 in the
   mid-1970s as an attempt at computer-refereed fantasy gaming, and
   expanded into a puzzle-oriented game by Don Woods at Stanford in
   1976. Now better known as Adventure, but the
                TOPS-10
                   operating system permitted only six-letter filenames. See also

                vadding
                ,
                Zork
                , and
                Infocom
                .

   This game defined the terse, dryly humorous style since expected in
   text adventure games, and popularized several tag lines that have
   become fixtures of hacker-speak: "A huge green fierce snake bars
   the way!" "I see no X here" (for some noun X). "You are in a
   maze of twisty little passages, all alike." "You are in a little
   maze of twisty passages, all different." The 'magic words'

                xyzzy
                 and
                plugh
                 also derive from this game.

    Crowther, by the way, participated in the exploration of the
    Mammoth & Flint Ridge cave system; it actually *has* a
    'Colossal Cave' and a 'Bedquilt' as in the game, and the 'Y2' that
    also turns up is cavers' jargon for a map reference to a secondary
    entrance.

AFAIK // n. [Usenet] Abbrev. for "As Far As I Know".

AFJ // n. Written-only abbreviation for "April Fool's
    Joke". Elaborate April Fool's hoaxes are a long-established
    tradition on Usenet and Internet; see
                kremvax
                 for an example.
    In fact, April Fool's Day is the *only* seasonal holiday
    marked by customary observances on the hacker networks.

AI /A-I/ n. Abbreviation for 'Artificial Intelligence',
    so common that the full form is almost never written or spoken
    among hackers.

AI-complete /A-I k*m-pleet'/ adj. [MIT, Stanford: by
    analogy with 'NP-complete' (see
                NP-
)] Used to describe
    problems or subproblems in AI, to indicate that the solution
    presupposes a solution to the 'strong AI problem' (that is, the
    synthesis of a human-level intelligence). A problem that is
    AI-complete is, in other words, just too hard.

    Examples of AI-complete problems are 'The Vision Problem'
    (building a system that can see as well as a human) and 'The
    Natural Language Problem' (building a system that can understand
    and speak a natural language as well as a human). These may appear
    to be modular, but all attempts so far (1996) to solve them have
    foundered on the amount of context information and 'intelligence'
    they seem to require. See also
                gedanken
                .

AI koans /A-I koh'anz/ pl.n. A series of pastiches of Zen
    teaching riddles created by Danny Hillis at the MIT AI Lab around
    various major figures of the Lab's culture (several are included
    under
                AI Koans
                 in Appendix A). See also
                ha ha only serious
                ,

                mu
                , and
                Humor, Hacker
                .

AIDS /aydz/ n. Short for A* Infected Disk Syndrome ('A*'
    is a
                glob
                 pattern that matches, but is not limited to, Apple),

this condition is quite often the result of practicing unsafe

SEX
. See
virus
,
worm
,
Trojan horse
,

virgin
.

AIDX n. /aydkz/ n. Derogatory term for IBM's perverted
version of Unix, AIX, especially for the AIX 3.? used in the IBM
RS/6000 series (some hackers think it is funnier just to pronounce
"AIX" as "aches"). A victim of the dreaded "hybridism"
disease, this attempt to combine the two main currents of the Unix
stream (
BSD
 and
USG Unix
) became a
monstrosity
 to
haunt system administrators' dreams. For example, if new accounts
are created while many users are logged on, the load average jumps
quickly over 20 due to silly implementation of the user databases.
For a quite similar disease, compare
HP-SUX
. Also, compare

Macintrash

Nominal Semidestructor
,
Open DeathTrap
,

ScumOS
,
sun-stools
.

airplane rule n. "Complexity increases the possibility of
failure; a twin-engine airplane has twice as many engine problems
as a single-engine airplane." By analogy, in both software and
electronics, the rule that simplicity increases robustness. It is
correspondingly argued that the right way to build reliable systems
is to put all your eggs in one basket, after making sure that
you've built a really *good* basket. See also
KISS Principle
.

aliasing bug n. A class of subtle programming errors that
can arise in code that does dynamic allocation, esp. via

`malloc(3)' or equivalent. If several pointers address
('aliases for') a given hunk of storage, it may happen that the
storage is freed or reallocated (and thus moved) through one alias
and then referenced through another, which may lead to subtle (and
possibly intermittent) lossage depending on the state and the
allocation history of the malloc
                arena
                . Avoidable by use of
allocation strategies that never alias allocated core, or by use of
higher-level languages, such as
                LISP
                , which employ a garbage
collector (see
                GC
). Also called a
                stale pointer bug
                .
    See also
                precedence lossage
                ,
                smash the stack
                ,

                fandango on core
                ,
                memory leak
                ,
                memory smash
                ,

                overrun screw
                ,
                spam
                .

    Historical note: Though this term is nowadays associated with
    C programming, it was already in use in a very similar sense in the
    Algol-60 and FORTRAN communities in the 1960s.

all-elbows adj. [MS-DOS] Of a TSR
    (terminate-and-stay-resident) IBM PC program, such as the N
    pop-up calendar and calculator utilities that circulate on
                BBS
                    systems: unsociable. Used to describe a program that rudely ←
                        steals
    the resources that it needs without considering that other TSRs may
    also be resident. One particularly common form of rudeness is
    lock-up due to programs fighting over the keyboard interrupt. See

                rude
                , also
                mess-dos
                .

alpha particles n. See
                bit rot
                .

alt /awlt/ 1. n. The alt shift key on an IBM PC or

                clone
                 keyboard; see
                bucky bits
                , sense 2 (though typical
   PC usage does not simply set the 0200 bit). 2. n. The 'clover'
   or 'Command' key on a Macintosh; use of this term usually reveals
   that the speaker hacked PCs before coming to the Mac (see also

                feature key
). Some Mac hackers, confusingly, reserve 'alt'
   for the Option key (and it is so labeled on some Mac II keyboards).
   3. n.obs. [PDP-10; often capitalized to ALT] Alternate name for
   the ASCII ESC character (ASCII 0011011), after the keycap labeling
   on some older terminals; also 'altmode' (/awlt'mohd/). This
   character was almost never pronounced 'escape' on an ITS system,
   in
                TECO
                , or under TOPS-10 -- always alt, as in "Type alt alt
   to end a TECO command" or "alt-U onto the system" (for "log
   onto the [ITS] system"). This usage probably arose because alt is
   more convenient to say than 'escape', especially when followed by
   another alt or a character (or another alt *and* a character,
   for that matter). 3. The alt hierarchy on Usenet, the tree of
   newsgroups created by users without a formal vote and approval
   procedure. There is a myth, not entirely implausible, that
   alt is acronymic for "anarchists, lunatics, and terrorists";
   but in fact it is simply short for "alternative".

alt bit /awlt bit/ [from alternate] adj. See
                meta bit
                .

altmode n. Syn.
                alt
                 sense 3.

Aluminum Book n. [MIT] "Common LISP: The Language", by
   Guy L. Steele Jr. (Digital Press, first edition 1984, second
   edition 1990). Note that due to a technical screwup some printings
   of the second edition are actually of a color the author describes
   succinctly as "yucky green". See also
                book titles
                .

amoeba n. Humorous term for the Commodore Amiga personal
   computer.

amp off vt. [Purdue] To run in
                background
                . From the
   Unix shell '&' operator.

amper n. Common abbreviation for the name of the ampersand
   ('&', ASCII 0100110) character. See

                        ASCII
                         for other synonyms.

angle brackets n. Either of the characters '<' (ASCII
   0111100) and '>' (ASCII 0111110) (ASCII less-than or
   greater-than signs). Typographers in the
                        Real World
                         use angle
   brackets which are either taller and slimmer (the ISO 'Bra' and
   'Ket' characters), or significantly smaller (single or double
   guillemets) than the less-than and greater-than signs.
   See
                        broket
                        ,
                        ASCII
                        .

angry fruit salad n. A bad visual-interface design that
   uses too many colors. (This term derives, of course, from the
   bizarre day-glo colors found in canned fruit salad.) Too often one
   sees similar effects from interface designers using color window
   systems such as
                        X
                        ; there is a tendency to create displays that
   are flashy and attention-getting but uncomfortable for long-term
   use.

annoybot /*-noy-bot/ n.   [IRC] See
                        robot
                        .

ANSI n. /an'see/ 1. n. [techspeak] The American National
   Standards Institue. ANSI, along with the International Standards
   Organization (ISO), standardized the C programming language (see

                        K&R
                        ,
                        Classic C
                        ), and promulgates many other important
   software standards. 2. n. [techspeak] A terminal may be said to be
   'ANSI' if it meets the ANSI X.364 standard for terminal control.
   Unfortunately, this standard was both over-complicated and too
   permissive. It has been retired and replaced by the ECMA-48
   standard, which shares both flaws. 3. n. [BBS jargon] The set of
   screen-painting codes that most MS-DOS and Amiga computers accept.
   This comes from the ANSI.SYS device driver that must be loaded on
   an MS-DOS computer to view such codes. Unfortunately, neither DOS
   ANSI nor the BBS ANSIs derived from it exactly match the ANSI X.364
   terminal standard. For example, the ESC-[1m code turns on the bold
   highlight on large machines, but in IBM PC/MS-DOS ANSI, it turns on
   'intense' (bright) colors. Also, in BBS-land, the term 'ANSI' is
   often used to imply that a particular computer uses or can emulate
   the IBM high-half character set from MS-DOS. Particular use
   depends on context. Occasionally, the vanilla ASCII character set
   is used with the color codes, but on BBSs, ANSI and 'IBM
   characters' tend to go together.

AOS 1. /aws/ (East Coast), /ay-os/ (West Coast) vt.,obs.
   To increase the amount of something. "AOS the campfire."
   [based on a PDP-10 increment instruction] Usage:
   considered silly, and now obsolete. Now largely supplanted by

                bump
                . See
                SOS
                . 2. n. A
                Multics
                -derived OS
   supported at one time by Data General. This was pronounced
   /A-O-S/ or /A-os/. A spoof of the standard AOS system
   administrator's manual ("How to Load and Generate your AOS
   System") was created, issued a part number, and circulated as
   photocopy folklore; it was called "How to Goad and Levitate
   your CHAOS System". 3. n. Algebraic Operating System, in reference
   to those calculators which use infix instead of postfix (reverse
   Polish) notation. 4. A
                BSD
                -like operating system for the IBM
   RT.

   Historical note: AOS in sense 1 was the name of a
                PDP-10
                    instruction that took any memory location in the computer and ↩
                        added
   1 to it; AOS meant 'Add One and do not Skip'. Why, you may ask,
   does the 'S' stand for 'do not Skip' rather than for 'Skip'? Ah,
   here was a beloved piece of PDP-10 folklore. There were eight such
   instructions: AOSE added 1 and then skipped the next instruction
   if the result was Equal to zero; AOSG added 1 and then skipped if
   the result was Greater than 0; AOSN added 1 and then skipped
   if the result was Not 0; AOSA added 1 and then skipped Always;
   and so on. Just plain AOS didn't say when to skip, so it never
   skipped.

   For similar reasons, AOJ meant 'Add One and do not Jump'. Even
   more bizarre, SKIP meant 'do not SKIP'! If you wanted to skip the
   next instruction, you had to say 'SKIPA'. Likewise, JUMP meant
   'do not JUMP'; the unconditional form was JUMPA. However, hackers
   never did this. By some quirk of the 10's design, the
                JRST
                    (Jump and ReSTore flag with no flag specified) was actually ↩
                        faster
   and so was invariably used. Such were the perverse mysteries of
   assembler programming.

app /ap/ n. Short for 'application program', as opposed
   to a systems program. Apps are what systems vendors are forever
   chasing developers to create for their environments so they can
   sell more boxes. Hackers tend not to think of the things they
   themselves run as apps; thus, in hacker parlance the term excludes
   compilers, program editors, games, and messaging systems, though a
   user would consider all those to be apps. (Broadly, an app is
   often a self-contained environment for performing some well-defined
   task such as 'word processing'; hackers tend to prefer more

general-purpose tools.) Oppose
tool
,
operating system
.

arena [Unix] n. The area of memory attached to a process by
   `brk(2)' and `sbrk(2)' and used by `malloc(3)' as
   dynamic storage. So named from a `malloc: corrupt arena'
   message emitted when some early versions detected an impossible
   value in the free block list. See
overrun screw
,
aliasing bug
,

memory leak
,
memory smash
,
smash the stack
.

arg /arg/ n. Abbreviation for `argument' (to a
   function), used so often as to have become a new word (like
   `piano' from `pianoforte'). "The sine function takes 1 arg,
   but the arc-tangent function can take either 1 or 2 args."
   Compare
param
,
parm
,
var
.

ARMM n. [acronym, `Automated Retroactive Minimal
   Moderation'] A Usenet robot created by Dick Depew of Munroe Falls,
   Ohio. ARMM was intended to automatically cancel posts from
   anonymous-posting sites. Unfortunately, the robot's recognizer for
   anonymous postings triggered on its own automatically-generated
   control messages! Transformed by this stroke of programming
   ineptitude into a monster of Frankensteinian proportions, it broke
   loose on the night of March 31, 1993 and proceeded to
spam
      news.admin.policy with a recursive explosion of over 200
   messages.

   ARMM's bug produced a recursive
cascade
       of messages each of which
   mechanically added text to the ID and Subject and some other
   headers of its parent. This produced a flood of messages in which
   each header took up several screens and each message ID and subject
   line got longer and longer and longer.

   Reactions varied from amusement to outrage. The pathological
   messages crashed at least one mail system, and upset people paying

line charges for their Usenet feeds. One poster described the ARMM
debacle as "instant Usenet history" (also establishing the term
                despew
                ), and it has since been widely cited as a cautionary
example of the havoc the combination of good intentions and
incompetence can wreak on a network. Compare
                Great Worm, the
                ;

                sorcerer's apprentice mode
                . See also
                software laser
                ,

                network meltdown
                .

armor-plated n. Syn. for
                bulletproof
                .

asbestos adj. Used as a modifier to anything intended to
    protect one from
                flame
                s; also in other highly

                flame
                -suggestive usages. See, for example,

                asbestos longjohns
                 and
                asbestos cork award
                .

asbestos cork award n. Once, long ago at MIT, there was a

                flamer
                 so consistently obnoxious that another hacker designed,
    had made, and distributed posters announcing that said flamer had
    been nominated for the 'asbestos cork award'. (Any reader in
    doubt as to the intended application of the cork should consult the
    etymology under
                flame
                .) Since then, it is agreed that only a
    select few have risen to the heights of bombast required to earn
    this dubious dignity -- but there is no agreement on *which*
    few.

asbestos longjohns n. Notional garments donned by

                Usenet
                 posters just before emitting a remark they expect will
    elicit
                flamage
                . This is the most common of the
                asbestos

coinages. Also 'asbestos underwear', 'asbestos overcoat', etc.

ASCII /as'kee/ n. [acronym: American Standard Code for
    Information Interchange] The predominant character set encoding of
    present-day computers. The modern version uses 7 bits for each
    character, whereas most earlier codes (including an early version
    of ASCII) used fewer. This change allowed the inclusion of
    lowercase letters -- a major
                win
                 -- but it did not provide
    for accented letters or any other letterforms not used in English
    (such as the German sharp-S
    or the ae-ligature
    which is a letter in, for example, Norwegian). It could be worse,
    though. It could be much worse. See
                EBCDIC
                 to understand how.

    Computers are much pickier and less flexible about spelling than
    humans; thus, hackers need to be very precise when talking about
    characters, and have developed a considerable amount of verbal
    shorthand for them. Every character has one or more names -- some
    formal, some concise, some silly. Common jargon names for ASCII
    characters are collected here. See also individual entries for

                bang
                ,
                excl
                ,
                open
                ,
                ques
                ,
                semi
                ,
                shriek
                ,

                splat
                ,
                twiddle
                , and
                Yu-Shiang Whole Fish
                .

    This list derives from revision 2.3 of the Usenet ASCII
    pronunciation guide. Single characters are listed in ASCII order;
    character pairs are sorted in by first member. For each character,
    common names are given in rough order of popularity, followed by
    names that are reported but rarely seen; official ANSI/CCITT names
    are surrounded by brokets: <>. Square brackets mark the
    particularly silly names introduced by
                INTERCAL
                . The
    abbreviations "l/r" and "o/c" stand for left/right and
    "open/close" respectively. Ordinary parentheticals provide some
    usage information.

!

      Common:
           bang
           ; pling; excl; shriek; <exclamation mark>.
      Rare: factorial; exclam; smash; cuss; boing; yell; wow; hey;
wham; eureka; [spark-spot]; soldier.

"

      Common: double quote; quote. Rare: literal mark;
double-glitch; <quotation marks>; <dieresis>; dirk;
[rabbit-ears]; double prime.

#

      Common: number sign; pound; pound sign; hash; sharp;

           crunch
           ; hex; [mesh]. Rare: grid; crosshatch; octothorpe;
flash; <square>, pig-pen; tictactoe; scratchmark; thud;
thump;
           splat
           .

$

      Common: dollar; <dollar sign>. Rare: currency symbol; buck;
cash; string (from BASIC); escape (when used as the echo of
ASCII ESC); ding; cache; [big money].

%

      Common: percent; <percent sign>; mod; grapes. Rare:
[double-oh-seven].

&

      Common: <ampersand>; amper; and. Rare: address (from C);
reference (from C++); andpersand; bitand; background (from
'sh(1)'); pretzel; amp. [INTERCAL called this 'ampersand';
what could be sillier?]

'

      Common: single quote; quote; <apostrophe>. Rare: prime;
glitch; tick; irk; pop; [spark]; <closing single quotation
mark>; <acute accent>.

( )

      Common: l/r paren; l/r parenthesis; left/right; open/close;
paren/thesis; o/c paren; o/c parenthesis; l/r parenthesis;
l/r banana. Rare: so/already; lparen/rparen;
<opening/closing parenthesis>; o/c round bracket, l/r round
bracket, [wax/wane]; parenthisey/unparenthisey; l/r ear.

*

      Common: star; [
           splat
           ]; <asterisk>. Rare: wildcard; gear;
dingle; mult; spider; aster; times; twinkle; glob (see

```
            glob
            );
            Nathan Hale
             .
```

+

     Common: <plus>; add. Rare: cross; [intersection].

,

     Common: <comma>. Rare: <cedilla>; [tail].

\-

     Common: dash; <hyphen>; <minus>. Rare: [worm]; option; dak;
     bithorpe.

.

     Common: dot; point; <period>; <decimal point>. Rare: radix
     point; full stop; [spot].

/

     Common: slash; stroke; <slant>; forward slash. Rare:
     diagonal; solidus; over; slak; virgule; [slat].

:

     Common: <colon>. Rare: dots; [two-spot].

;

     Common: <semicolon>; semi. Rare: weenie; [hybrid],
     pit-thwong.

< >

     Common: <less/greater than>; bra/ket; l/r angle; l/r angle
     bracket; l/r broket. Rare: from/{into, towards}; read
     from/write to; suck/blow; comes-from/gozinta; in/out;
     crunch/zap (all from UNIX); [angle/right angle].

=

     Common: <equals>; gets; takes. Rare: quadrathorpe;
     [half-mesh].

?

     Common: query; <question mark>;
         ques
        . Rare: whatmark;
    [what]; wildchar; huh; hook; buttonhook; hunchback.

@

     Common: at sign; at; strudel. Rare: each; vortex; whorl;
     [whirlpool]; cyclone; snail; ape; cat; rose; cabbage;
     <commercial at>.

V

     Rare: [book].

[ ]

     Common: l/r square bracket; l/r bracket; <opening/closing
     bracket>; bracket/unbracket. Rare: square/unsquare; [U

```
        turn/U turn back].

  \

        Common: backslash; escape (from C/UNIX); reverse slash;
        slosh; backslant; backwhack.  Rare: bash; <reverse slant>;
        reversed virgule; [backslat].

  ^

        Common: hat; control; uparrow; caret; <circumflex>.  Rare:
        chevron; [shark (or shark-fin)]; to the ('to the power of');
        fang; pointer (in Pascal).


  _

        Common: <underline>; underscore; underbar; under.  Rare:
        score; backarrow; skid; [flatworm].

  `

        Common: backquote; left quote; left single quote; open
        quote; <grave accent>; grave.  Rare: backprime; [backspark];
        unapostrophe; birk; blugle; back tick; back glitch; push;
        <opening single quotation mark>; quasiquote.

  { }
        Common: o/c brace; l/r brace; l/r squiggly; l/r squiggly
        bracket/brace; l/r curly bracket/brace; <opening/closing
        brace>.  Rare: brace/unbrace; curly/uncurly; leftit/rytit;
        l/r squirrelly; [embrace/bracelet].

  |

        Common: bar; or; or-bar; v-bar; pipe; vertical bar.  Rare:
        <vertical line>; gozinta; thru; pipesinta (last three from
        UNIX); [spike].

  ~
        Common: <tilde>; squiggle;
              twiddle
              ; not.  Rare: approx;
        wiggle; swung dash; enyay; [sqiggle (sic)].
```

The pronunciation of '#' as 'pound' is common in the U.S.
but a bad idea;
            Commonwealth Hackish
             has its own, rather more
apposite use of 'pound sign' (confusingly, on British keyboards
the pound graphic
happens to replace '#'; thus Britishers sometimes
call '#' on a U.S.-ASCII keyboard 'pound', compounding the
American error). The U.S. usage derives from an old-fashioned
commercial practice of using a '#' suffix to tag pound weights
on bills of lading. The character is usually pronounced 'hash'
outside the U.S.

The 'uparrow' name for circumflex and 'leftarrow' name for
underline are historical relics from archaic ASCII (the 1963
version), which had these graphics in those character positions
rather than the modern punctuation characters.

The 'swung dash' or 'approximation' sign is not quite the same
as tilde in typeset material
but the ASCII tilde serves for both (compare
          angle brackets
).

Some other common usages cause odd overlaps. The '#',
'$', '>', and '&' characters, for example, are all
pronounced "hex" in different communities because various
assemblers use them as a prefix tag for hexadecimal constants (in
particular, '#' in many assembler-programming cultures,
'$' in the 6502 world, '>' at Texas Instruments, and
'&' on the BBC Micro, Sinclair, and some Z80 machines). See
also
          splat
          .

The inability of ASCII text to correctly represent any of the
world's other major languages makes the designers' choice of 7 bits
look more and more like a serious
          misfeature
           as the use of
international networks continues to increase (see
          software rot
).
Hardware and software from the U.S. still tends to embody
the assumption that ASCII is the universal character set and that
characters have 7 bits; this is a a major irritant to people who
want to use a character set suited to their own languages.
Perversely, though, efforts to solve this problem by proliferating
'national' character sets produce an evolutionary pressure to use
a *smaller* subset common to all those in use.

ASCII art n. The fine art of drawing diagrams using the
   ASCII character set (mainly '|', '-', '/', '\',
   and '+'). Also known as 'character graphics' or 'ASCII
   graphics'; see also
          boxology
          . Here is a serious
   example:

```
        o----)||(--+--|<----+   +---------o + D O
          L  )||(  |        |   |            C U
        A I  )||(  +-->|-+   |   +-\/\/-+--o -   T
        C N  )||(       |  | |   |      |        P
          E  )||(  +-->|-+--)---+--)|--+-o       U
             )||(  |        |           | GND    T
        o----)||(--+--|<----+---------+
```
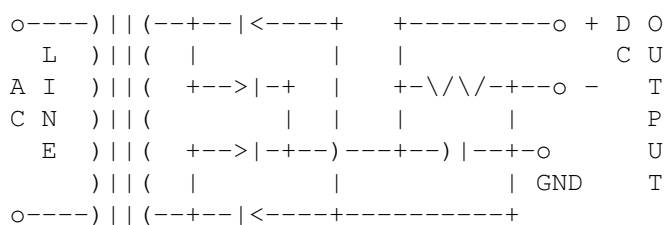
        A power supply consisting of a full wave rectifier circuit
        feeding a capacitor input filter circuit

                        Figure 1.

And here are some very silly examples:

```
     |\/\/\/|       ____/|            ___      |\_/|    ___
     |      |       \ o.O|   ACK!     /   \_  |' '|  _/   \
     |      |        =(_)=   THPHTH!  /     \/     \/      \
     | (o)(o)          U            /                      \
     C      _)  (__)                  \/\/\/\  _____  /\/\/\/
     | ,___|    (oo)                        \/      \/
     |   /      \/-------\          U                    (__)
    /_____\       ||     | \    /---V   'v'-            oo )
   /       \      ||---W||  *   * |--|    || |'.         |_/\
                                                     
           //-o-\
         ____--========---____
       ====___\   /.. ..\   /___====         Klingons rule OK!
      //         ---\__O__/---        \
      \_\                            /_/
```
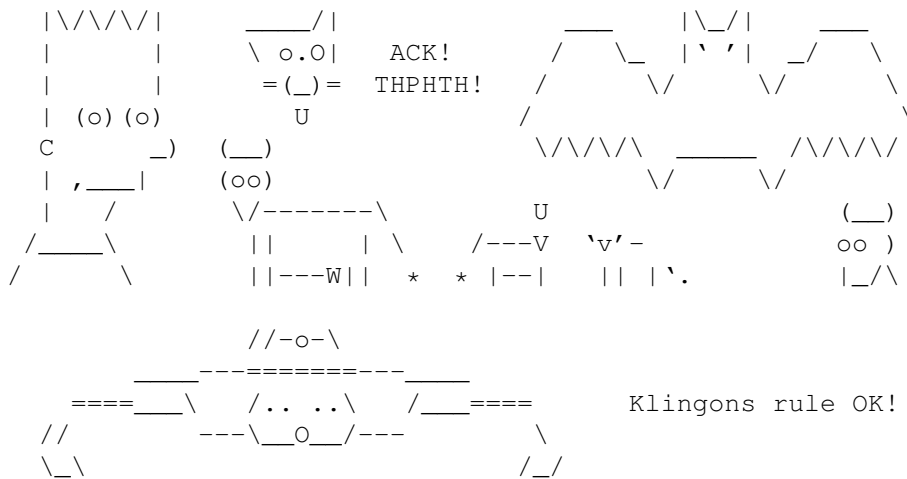
                        Figure 2.

   There is an important subgenre of ASCII art that puns on the
   standard character names in the fashion of a rebus.

```
     +---------------------------------------------------------+
     |      ^^^^^^^^^^^                                         |
     | ^^^^^^^^^^^              ^^^^^^^^                        |
     |             ^^^^^^^^^^^^^             ^^^^^^^^^^^^^ |
     |      ^^^^^^^        B        ^^^^^^^^^             |
     |  ^^^^^^^^^        ^^^            ^^^^^^^^^^^^^      |
     +---------------------------------------------------------+
```
                " A Bee in the Carrot Patch "
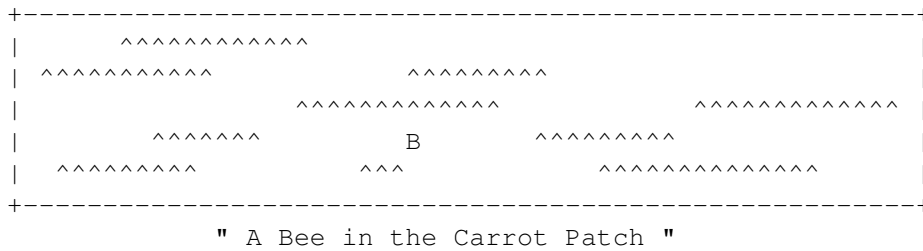
                        Figure 3.

   Within humorous ASCII art, there is for some reason an entire
   flourishing subgenre of pictures of silly cows. Four of these are
   reproduced in Figure 2; here are three more:

```
            (__)                 (__)                 (__)
            (\/)                 ($$)                 (**)
      /-------\/          /-------\/          /-------\/
     / | 666 ||          / |=====||          / |     ||
     *  ||----||          *  ||----||          *  ||----||
       ~~    ~~            ~~    ~~            ~~    ~~
      Satanic cow    This cow is a Yuppie   Cow in love
```
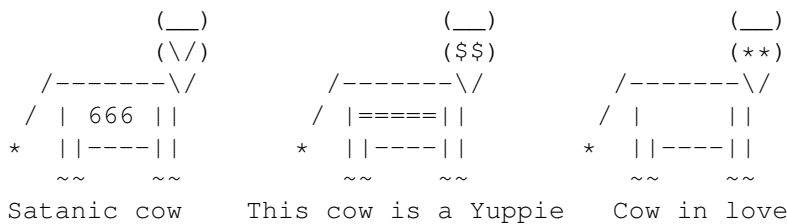
                        Figure 4.

   There is a newsgroup, alt.ascii.art, devoted to this
   genre; however, see also
               warlording
                  .

ASCIIbetical order /as'kee-be'-t*-kl or'dr/ adj.,n. Used
   to indicate that data is sorted in ASCII collated order rather than
   alphabetical order. This lexicon is sorted in something close to
   ASCIIbetical order, but with case ignored and entries beginning

   with non-alphabetic characters moved to the end.

atomic adj. [from Gk. 'atomos', indivisible]
   1. Indivisible; cannot be split up. For example, an instruction
   may be said to do several things 'atomically', i.e., all the
   things are done immediately, and there is no chance of the
   instruction being half-completed or of another being interspersed.
   Used esp. to convey that an operation cannot be screwed up by
   interrupts. "This routine locks the file and increments the
   file's semaphore atomically." 2. [primarily techspeak] Guaranteed
   to complete successfully or not at all, usu. refers to database
   transactions. If an error prevents a partially-performed
   transaction from proceeding to completion, it must be "backed out,"
   as the database must not be left in an inconsistent state.

   Computer usage, in either of the above senses, has none of the
   connotations that 'atomic' has in mainstream English (i.e. of
   particles of matter, nuclear explosions etc.).

attoparsec n. About an inch. 'atto-' is the standard SI
   prefix for multiplication by 10^{-18}. A parsec
   (parallax-second) is 3.26 light-years; an attoparsec is thus
   $3.26 * 10^{-18}$ light years, or about 3.1 cm (thus, 1
   attoparsec/
                microfortnight
                 equals about 1 inch/sec). This unit
   is reported to be in use (though probably not very seriously) among
   hackers in the U.K. See
                micro-
                .

autobogotiphobia /aw'toh-boh-got'*-foh'bee-*/ n. See

                bogotify
                .

automagically /aw-toh-maj'i-klee/ adv. Automatically, but
   in a way that, for some reason (typically because it is too
   complicated, or too ugly, or perhaps even too trivial), the speaker
   doesn't feel like explaining to you. See
                magic
                . "The
   C-INTERCAL compiler generates C, then automagically invokes
   'cc(1)' to produce an executable."

avatar n. Syn. 1. Among people working on virtual reality
   and
                cyberspace
                 interfaces, an "avatar" is an icon or
   representation of a user in a shared virtual reality. The term is
   sumetimes used on
                MUD
                s. 2. [CMU, Tektronix]
                root
                ,

                superuser

. There are quite a few Unix machines on which the
name of the superuser account is 'avatar' rather than 'root'.
This quirk was originated by a CMU hacker who disliked the term
'superuser', and was propagated through an ex-CMU hacker at
Tektronix.

awk /awk/ 1. n. [Unix techspeak] An interpreted language
for massaging text data developed by Alfred Aho, Peter Weinberger,
and Brian Kernighan (the name derives from their initials). It is
characterized by C-like syntax, a declaration-free approach to
variable typing and declarations, associative arrays, and
field-oriented text processing. See also
            Perl
            . 2. n.
Editing term for an expression awkward to manipulate through normal

            regexp
             facilities (for example, one containing a

            newline
). 3. vt. To process data using 'awk(1)'.

1.7   B

            back door n. A hole in the security of a system
deliberately left in place by designers or maintainers. The
motivation for such holes is not always sinister; some operating
systems, for example, come out of the box with privileged accounts
intended for use by field service technicians or the vendor's
maintenance programmers. Syn.
            trap door
            ; may also be called a
'wormhole'. See also
            iron box
            ,
            cracker
            ,
            worm
            ,

            logic bomb
            .

Historically, back doors have often lurked in systems longer than
anyone expected or planned, and a few have become widely known.
Ken Thompson's 1983 Turing Award lecture to the ACM suggested the
possibility of a back door in early Unix versions that may have
qualified as the most fiendishly clever security hack of all time
In this scheme, the C compiler contained code that would recognize
when the 'login' command was being recompiled and insert some
code recognizing a password chosen by Thompson, giving him entry to
the system whether or not an account had been created for him.

Normally such a back door could be removed by removing it from the

source code for the compiler and recompiling the compiler. But to
recompile the compiler, you have to *use* the compiler -- so
Thompson also arranged that the compiler would *recognize when
it was compiling a version of itself*, and insert into the
recompiled compiler the code to insert into the recompiled
`login` the code to allow Thompson entry -- and, of course, the
code to recognize itself and do the whole thing again the next time
around! And having done this once, he was then able to recompile
the compiler from the original sources; the hack perpetuated itself
invisibly, leaving the back door in place and active but with no
trace in the sources.

The talk that suggested this truly moby hack was published as
"Reflections on Trusting Trust", "Communications of the ACM
27", 8 (August 1984), pp. 761--763. Ken Thompson has since
confirmed that this hack was implemented and that the Trojan Horse
code did appear in the login binary of a Unix Support group
machine. Ken says the crocked compiler was never distributed.
Your editor has heard two separate reports that suggest that the
crocked login did make it out of Bell Labs, notably to BBN, and
that it enabled at least one late-night login across the network by
someone using the login name `kt`.

backbone cabal n. A group of large-site administrators who
   pushed through the
                  Great Renaming
                   and reined in the chaos of

                  Usenet
                   during most of the 1980s. The cabal
                  mailing list
                     disbanded in late 1988 after a bitter internal catfight.

backbone site n. A key Usenet and email site; one that
   processes a large amount of third-party traffic, especially if it
   is the home site of any of the regional coordinators for the Usenet
   maps. Notable backbone sites as of early 1993, when this sense of
   the term was beginning to pass out of general use due to wide
   availability of cheap Internet connections, included uunet and
   the mail machines at Rutgers University, UC Berkeley,
                  DEC
                  's
   Western Research Laboratories, Ohio State University, and the
   University of Texas. Compare
                  rib site
                  ,
                  leaf site
                  .

   [1996 update: This term is seldom heard any more. The UUCP network
   world that gave it meaning has nearly disappeared; everyone is on
   the Internet now and network traffic is distributed in very
   different patterns. --ESR]

backgammon See
                  bignum
                   (sense 3),

                        moby
                         (sense 4),
       and
                        pseudoprime
                        .

background n.,adj.,vt. To do a task 'in background' is to
   do it whenever
                        foreground
                         matters are not claiming your
   undivided attention, and 'to background' something means to
   relegate it to a lower priority. "For now, we'll just print a
   list of nodes and links; I'm working on the graph-printing problem
   in background." Note that this implies ongoing activity but at a
   reduced level or in spare time, in contrast to mainstream 'back
   burner' (which connotes benign neglect until some future resumption
   of activity). Some people prefer to use the term for processing
   that they have queued up for their unconscious minds (a tack that
   one can often fruitfully take upon encountering an obstacle in
   creative work). Compare
                        amp off
                        ,
                        slopsucker
                        .

   Technically, a task running in background is detached from the
   terminal where it was started (and often running at a lower
   priority); oppose
                        foreground
                        . Nowadays this term is primarily
   associated with
                        Unix
                        , but it appears to have been first used
   in this sense on OS/360.

backspace and overstrike interj. Whoa! Back up. Used to
   suggest that someone just said or did something wrong. Common
   among APL programmers.

backward combatability /bak'w*rd k*m-bat'*-bil'*-tee/ n.
   [CMU, Tektronix: from 'backward compatibility'] A property of
   hardware or software revisions in which previous protocols,
   formats, layouts, etc. are irrevocably discarded in favor of 'new
   and improved' protocols, formats, and layouts, leaving the previous
   ones not merely deprecated but actively defeated. (Too often, the
   old and new versions cannot definitively be distinguished, such
   that lingering instances of the previous ones yield crashes or
   other infelicitous effects, as opposed to a simple "version
   mismatch" message.) A backwards compatible change, on the other
   hand, allows old versions to coexist without crashes or error
   messages, but too many major changes incorporating elaborate
   backwards compatibility processing can lead to extreme

                        software bloat
                        . See also
                        flag day
                        .

BAD /B-A-D/ adj. [IBM: acronym, 'Broken As Designed']
   Said of a program that is
               bogus
                because of bad design and
   misfeatures rather than because of bugginess. See

               working as designed
               .

Bad Thing n. [from the 1930 Sellar & Yeatman parody "1066
   And All That"] Something that can't possibly result in
   improvement of the subject. This term is always capitalized, as in
   "Replacing all of the 9600-baud modems with bicycle couriers would
   be a Bad Thing". Oppose
               Good Thing
               . British correspondents
   confirm that
               Bad Thing
                and
               Good Thing
                (and prob.
   therefore
               Right Thing
                and
               Wrong Thing
) come from the book
   referenced in the etymology, which discusses rulers who were Good
   Kings but Bad Things. This has apparently created a mainstream
   idiom on the British side of the pond.

bag on the side n. An extension to an established hack that
   is supposed to add some functionality to the original. Usually
   derogatory, implying that the original was being overextended and
   should have been thrown away, and the new product is ugly,
   inelegant, or bloated. Also v. phrase, 'to hang a bag on the side
   [of]'. "C++? That's just a bag on the side of C ...."
   "They want me to hang a bag on the side of the accounting
   system."

bagbiter /bag'bi:t-*r/ n. 1. Something, such as a program
   or a computer, that fails to work, or works in a remarkably clumsy
   manner. "This text editor won't let me make a file with a line
   longer than 80 characters! What a bagbiter!" 2. A person who has
   caused you some trouble, inadvertently or otherwise, typically by
   failing to program the computer properly. Synonyms:
               loser
               ,

               cretin
               ,
               chomper
               . 3. 'bite the bag' vi. To fail in some
   manner. "The computer keeps crashing every five minutes."
   "Yes, the disk controller is really biting the bag." The
   original loading of these terms was almost undoubtedly obscene,
   possibly referring to the scrotum, but in their current usage they

have become almost completely sanitized.

ITS's
              lexiphage
               program is the first and to date only known
   example of a program *intended* to be a bagbiter.

bagbiting adj. Having the quality of a
              bagbiter
              .
   "This bagbiting system won't let me compute the factorial of a
   negative number." Compare
              losing
              ,
              cretinous
              ,

              bletcherous
              , 'barfucious' (under
              barfulous
) and
   'chomping' (under
              chomp
).

balloonian variable n. [Commodore users; perh. a deliberate
   phonetic mangling of 'boolean variable'?] Any variable that
   doesn't actually hold or control state, but must nevertheless be
   declared, checked, or set. A typical balloonian variable started
   out as a flag attached to some environment feature that either
   became obsolete or was planned but never implemented.
   Compatibility concerns (or politics attached to same) may require
   that such a flag be treated as though it were live.

bamf /bamf/ 1. [from X-Men comics; originally "bampf"]
   interj. Notional sound made by a person or object teleporting in or
   out of the hearer's vicinity. Often used in
              virtual reality
                 (esp.
              MUD
) electronic
              fora
               when a character wishes to
   make a dramatic entrance or exit. 2. The sound of magical
   transformation, used in virtual reality
              fora
               like MUDs. 3. In
   MUD circles, "bamf" is also used to refer to the act by which a
   MUD server sends a special notification to the MUD client to switch
   its connection to another server ("I'll set up the old site to
   just bamf people over to our new location."). 4. Used by MUDders
   on occasion in a more general sense related to sense 3, to refer to
   directing someone to another location or resource ("A user was
   asking about some technobabble so I bamfed them to
   http://www.ccil.org/jargon/jargon.html.")

banana label n. The labels often used on the sides of

```
            macrotape
             reels, so called because they are shaped roughly
   like blunt-ended bananas.  This term, like macrotapes themselves,
   is still current but visibly headed for obsolescence.

banana problem n.  [from the story of the little girl who
   said "I know how to spell 'banana', but I don't know when to
   stop"].  Not knowing where or when to bring a production to a
   close (compare
            fencepost error
            ).  One may say 'there is a
   banana problem' of an algorithm with poorly defined or incorrect
   termination conditions, or in discussing the evolution of a design
   that may be succumbing to featuritis (see also
            creeping elegance
            ,

            creeping featuritis
            ).  See item 176 under

            HAKMEM
            , which describes a banana problem in a
            Dissociated Press
              implementation.  Also, see
            one-banana problem
             for a
   superficially similar but unrelated usage.

bandwidth n.  1. Used by hackers (in a generalization of its
   technical meaning) as the volume of information per unit time that
   a computer, person, or transmission medium can handle.  "Those are
   amazing graphics, but I missed some of the detail -- not enough
   bandwidth, I guess."  Compare
            low-bandwidth
            . 2. Attention
   span.  3. On
            Usenet
            , a measure of network capacity that is
   often wasted by people complaining about how items posted by others
   are a waste of bandwidth.

bang  1. n. Common spoken name for '!' (ASCII 0100001),
   especially when used in pronouncing a
            bang path
             in spoken
   hackish.  In
            elder days
             this was considered a CMUish usage,
   with MIT and Stanford hackers preferring
            excl
             or
            shriek
            ;
   but the spread of Unix has carried 'bang' with it (esp. via the
   term
            bang path
```

) and it is now certainly the most common spoken
name for '!'. Note that it is used exclusively for
non-emphatic written '!'; one would not say "Congratulations
bang" (except possibly for humorous purposes), but if one wanted
to specify the exact characters 'foo!' one would speak "Eff oh oh
bang". See
>   shriek
>   ,
>   ASCII
>   . 2. interj. An exclamation
signifying roughly "I have achieved enlightenment!", or "The
dynamite has cleared out my brain!" Often used to acknowledge
that one has perpetrated a
>   thinko
>   immediately after one has
been called on it.

bang on vt. To stress-test a piece of hardware or software:
"I banged on the new version of the simulator all day yesterday
and it didn't crash once. I guess it is ready for release." The
term
>   pound on
>   is synonymous.

bang path n. An old-style UUCP electronic-mail address
specifying hops to get from some assumed-reachable location to the
addressee, so called because each
>   hop
>   is signified by a

>   bang
>   sign. Thus, for example, the path
...!bigsite!foovax!barbox!me directs people to route their mail
to machine bigsite (presumably a well-known location accessible
to everybody) and from there through the machine foovax to the
account of user me on barbox.

In the bad old days of not so long ago, before autorouting mailers
became commonplace, people often published compound bang addresses
using the { } convention (see
>   glob
>   ) to give paths from
several big machines, in the hopes that one's correspondent
might be able to get mail to one of them reliably (example:
...!{seismo, ut-sally, ihnp4}!rice!beta!gamma!me). Bang paths
of 8 to 10 hops were not uncommon in 1981. Late-night dial-up
UUCP links would cause week-long transmission times. Bang paths
were often selected by both transmission time and reliability, as
messages would often get lost. See
>   Internet address
>   ,

>   network, the
>   , and
>   sitename
>   .

banner n.   1. The title page added to printouts by most
   print spoolers (see
                  spool
).   Typically includes user or
   account ID information in very large character-graphics capitals.
   Also called a 'burst page', because it indicates where to burst
   (tear apart) fanfold paper to separate one user's printout from the
   next.   2. A similar printout generated (typically on multiple pages
   of fan-fold paper) from user-specified text, e.g., by a program
   such as Unix's 'banner({1,6})'.   3. On interactive software,
   a first screen containing a logo and/or author credits and/or a
   copyright notice.

bar /bar/ n.   1. The second
                  metasyntactic variable
                  ,
   after
                  foo
                   and before
                  baz
                  .   "Suppose we have two
   functions: FOO and BAR.   FOO calls BAR...." 2. Often
   appended to
                  foo
                   to produce
                  foobar
                  .

bare metal n.   1. New computer hardware, unadorned with such
   snares and delusions as an
                  operating system
                  , an
                  HLL
                  , or
   even assembler.   Commonly used in the phrase 'programming on the
   bare metal', which refers to the arduous work of
                  bit bashing
                    needed to create these basic tools for a new machine.   Real
   bare-metal programming involves things like building boot proms and
   BIOS chips, implementing basic monitors used to test device
   drivers, and writing the assemblers that will be used to write the
   compiler back ends that will give the new machine a real
   development environment.   2. 'Programming on the bare metal' is
   also used to describe a style of
                  hand-hacking
                   that relies on
   bit-level peculiarities of a particular hardware design, esp.
   tricks for speed and space optimization that rely on crocks such as
   overlapping instructions (or, as in the famous case described in

                  The Story of Mel, a Real Programmer
                   (in Appendix A),
   interleaving of opcodes on a magnetic drum to minimize fetch delays
   due to the device's rotational latency).   This sort of thing has
   become less common as the relative costs of programming time and
   machine resources have changed, but is still found in heavily
   constrained environments such as industrial embedded systems, and

in the code of hackers who just can't let go of that low-level
control. See
                Real Programmer
                .

In the world of personal computing, bare metal programming
(especially in sense 1 but sometimes also in sense 2) is often
considered a
                Good Thing
                , or at least a necessary evil
(because these machines have often been sufficiently slow and
poorly designed to make it necessary; see
                ill-behaved
).
There, the term usually refers to bypassing the BIOS or OS
interface and writing the application to directly access device
registers and machine addresses. "To get 19.2 kilobaud on the
serial port, you need to get down to the bare metal." People who
can do this sort of thing well are held in high regard.

barf /barf/ [from mainstream slang meaning 'vomit']
   1. interj. Term of disgust. This is the closest hackish
   equivalent of the Val\-speak "gag me with a spoon". (Like,
   euwww!) See
                bletch
                . 2. vi. To say "Barf!" or emit some
   similar expression of disgust. "I showed him my latest hack and
   he barfed" means only that he complained about it, not that he
   literally vomited. 3. vi. To fail to work because of unacceptable
   input, perhaps with a suitable error message, perhaps not.
   Examples: "The division operation barfs if you try to divide by
   0." (That is, the division operation checks for an attempt to
   divide by zero, and if one is encountered it causes the operation
   to fail in some unspecified, but generally obvious, manner.) "The
   text editor barfs if you try to read in a new file before writing
   out the old one." See
                choke
                ,
                gag
                . In Commonwealth
   Hackish, 'barf' is generally replaced by 'puke' or 'vom'.

                barf
                 is sometimes also used as a
                metasyntactic variable
                ,
   like
                foo
                 or
                bar
                .

barfmail n. Multiple
                bounce message
                s accumulating to
   the level of serious annoyance, or worse. The sort of thing that
   happens when an inter-network mail gateway goes down or wonky.

barfulation /bar`fyoo-lay'sh*n/ interj. Variation of

> barf

 used around the Stanford area. An exclamation,
expressing disgust. On seeing some particularly bad code one might
exclaim, "Barfulation! Who wrote this, Quux?"

barfulous /bar'fyoo-l*s/ adj. (alt. `barfucious',
/bar-fyoo-sh*s/) Said of something that would make anyone
barf, if only for esthetic reasons.

barney n. In Commonwealth hackish, `barney' is to

> fred

 (sense #1) as

> bar

 is to

> foo

. That is, people
who commonly use `fred' as their first metasyntactic variable
will often use `barney' second. The reference is, of course, to
Fred Flintstone and Barney Rubble in the Flintstones cartoons.

baroque adj. Feature-encrusted; complex; gaudy; verging on
excessive. Said of hardware or (esp.) software designs, this has
many of the connotations of

> elephantine

 or

> monstrosity

 but is less extreme and not pejorative in itself. "Metafont ←
   even
has features to introduce random variations to its letterform
output. Now *that* is baroque!" See also

> rococo

.

BASIC n. [acronym: Beginner's All-purpose Symbolic
Instruction Code] A programming language, originally designed for
Dartmouth's experimental timesharing system in the early 1960s,
which has since become the leading cause of brain-damage in
proto-hackers. Edsger W. Dijkstra observed in "Selected
Writings on Computing: A Personal Perspective" that "It is
practically impossible to teach good programming style to students
that have had prior exposure to BASIC: as potential programmers
they are mentally mutilated beyond hope of regeneration.". This
is another case (like

> Pascal

) of the cascading lossage that
happens when a language deliberately designed as an educational toy
gets taken too seriously. A novice can write short BASIC programs
(on the order of 10--20 lines) very easily; writing anything longer
(a) is very painful, and (b) encourages bad habits that will make
it harder to use more powerful languages well. This wouldn't be so
bad if historical accidents hadn't made BASIC so common on low-end
micros. As it is, it ruins thousands of potential wizards a
year.

   [1995: Some languages called 'BASIC' aren't quite this nasty any
   more, having acquired Pascal- and C-like procedures and control
   structures and shed their line numbers. -- ESR]

batch adj. 1. Non-interactive. Hackers use this somewhat
   more loosely than the traditional technical definitions justify; in
   particular, switches on a normally interactive program that prepare
   it to receive non-interactive command input are often referred to
   as 'batch mode' switches. A 'batch file' is a series of
   instructions written to be handed to an interactive program running
   in batch mode. 2. Performance of dreary tasks all at one sitting.
   "I finally sat down in batch mode and wrote out checks for all
   those bills; I guess they'll turn the electricity back on next
   week..." 3. 'batching up': Accumulation of a number of small
   tasks that can be lumped together for greater efficiency. "I'm
   batching up those letters to send sometime" "I'm batching up
   bottles to take to the recycling center."

bathtub curve n. Common term for the curve (resembling an
   end-to-end section of one of those claw-footed antique bathtubs)
   that describes the expected failure rate of electronics with time:
   initially high, dropping to near 0 for most of the system's
   lifetime, then rising again as it 'tires out'. See also

                burn-in period
                ,
                infant mortality
                .

baud /bawd/ [simplified from its technical meaning]
   n. Bits per second. Hence kilobaud or Kbaud, thousands of bits per
   second. The technical meaning is 'level transitions per
   second'; this coincides with bps only for two-level modulation with
   no framing or stop bits. Most hackers are aware of these nuances
   but blithely ignore them.

   Historical note: 'baud' was originally a unit of telegraph
   signalling speed, set at one pulse per second. It was proposed at
   the International Telegraph Conference of 1927, and named after
   J.M.E. Baudot (1845--1903), the French engineer who constructed
   the first successful teleprinter.

baud barf /bawd barf/ n. The garbage one gets on the
   monitor when using a modem connection with some protocol setting
   (esp. line speed) incorrect, or when someone picks up a voice
   extension on the same line, or when really bad line noise disrupts
   the connection. Baud barf is not completely
                random
                , by the
   way; hackers with a lot of serial-line experience can usually tell
   whether the device at the other end is expecting a higher or lower
   speed than the terminal is set to. *Really* experienced ones
   can identify particular speeds.

baz /baz/ n. 1. The third
                metasyntactic variable

```
                   "Suppose we have three functions: FOO, BAR, and BAZ.  FOO calls
   BAR, which calls BAZ...." (See also
                   fum
                   ) 2. interj. A
   term of mild annoyance.  In this usage the term is often drawn out
   for 2 or 3 seconds, producing an effect not unlike the bleating of
   a sheep; /baaaaaaz/.  3. Occasionally appended to
                   foo
                    to
   produce 'foobaz'.

   Earlier versions of this lexicon derived 'baz' as a Stanford
   corruption of
                   bar
                   .  However, Pete Samson (compiler of the

                   TMRC
                    lexicon) reports it was already current when he joined TMRC
   in 1958.  He says "It came from "Pogo".  Albert the Alligator,
   when vexed or outraged, would shout 'Bazz Fazz!' or 'Rowrbazzle!'
   The club layout was said to model the (mythical) New England
   counties of Rowrfolk and Bassex (Rowrbazzle mingled with
   (Norfolk/Suffolk/Middlesex/Essex)."

bboard /bee'bord/ n.  [contraction of 'bulletin board']
   1. Any electronic bulletin board; esp. used of
                   BBS
                    systems
   running on personal micros, less frequently of a Usenet

                   newsgroup
                    (in fact, use of this term for a newsgroup generally
   marks one either as a
                   newbie
                    fresh in from the BBS world or as
   a real old-timer predating Usenet).  2. At CMU and other colleges
   with similar facilities, refers to campus-wide electronic bulletin
   boards.  3. The term 'physical bboard' is sometimes used to refer
   to an old-fashioned, non-electronic cork-and-thumbtack memo board.
   At CMU, it refers to a particular one outside the CS Lounge.

   In either of senses 1 or 2, the term is usually prefixed by the
   name of the intended board ('the Moonlight Casino bboard' or
   'market bboard'); however, if the context is clear, the better-read
   bboards may be referred to by name alone, as in (at CMU) "Don't
   post for-sale ads on general".

BBS /B-B-S/ n.  [abbreviation, 'Bulletin Board System'] An
   electronic bulletin board system; that is, a message database where
   people can log in and leave broadcast messages for others grouped
   (typically) into
                   topic group
                   s.  Thousands of local BBS systems
   are in operation throughout the U.S., typically run by amateurs for
   fun out of their homes on MS-DOS boxes with a single modem line
   each.  Fans of Usenet and Internet or the big commercial
   timesharing bboards such as CompuServe and GEnie tend to consider
```

    local BBSes the low-rent district of the hacker culture, but they
    serve a valuable function by knitting together lots of hackers and
    users in the personal-micro world who would otherwise be unable to
    exchange code at all. See also
                bboard
                .

beam vt. [from Star Trek Classic's "Beam me up, Scotty!"]
    To transfer
                softcopy
                 of a file electronically; most often
    in combining forms such as 'beam me a copy' or 'beam that over
    to his site'. Compare
                blast
                ,
                snarf
                ,
                BLT
                .

beanie key n. [Mac users] See
                command key
                .

beep n.,v. Syn.
                feep
                . This term seems to be preferred
    among micro hobbyists.

beige toaster n. A Macintosh. See
                toaster
                ; compare

                Macintrash
                ,
                maggotbox
                .

bells and whistles n. [by analogy with the toyboxes on theater
    organs] Features added to a program or system to make it more

                flavorful
                 from a hacker's point of view, without necessarily
    adding to its utility for its primary function. Distinguished from

                chrome
                , which is intended to attract users. "Now that we've
    got the basic program working, let's go back and add some bells and
    whistles." No one seems to know what distinguishes a bell from a
    whistle.

bells, whistles, and gongs n. A standard elaborated form of

                bells and whistles
                ; typically said with a pronounced and
    ironic accent on the 'gongs'.

benchmark [techspeak] n. An inaccurate measure of computer
   performance. "In the computer industry, there are three kinds of
   lies: lies, damn lies, and benchmarks." Well-known ones include
   Whetstone, Dhrystone, Rhealstone (see
                h
                ), the Gabriel LISP
   benchmarks (see
                gabriel
                ), the SPECmark suite, and LINPACK.
   See also
                machoflops
                ,
                MIPS
                ,
                smoke and mirrors
                .

Berkeley Quality Software adj. (often abbreviated 'BQS')
   Term used in a pejorative sense to refer to software that was
   apparently created by rather spaced-out hackers late at night to
   solve some unique problem. It usually has nonexistent, incomplete,
   or incorrect documentation, has been tested on at least two
   examples, and core dumps when anyone else attempts to use it. This
   term was frequently applied to early versions of the 'dbx(1)'
   debugger. See also
                Berzerkeley
                .

   Note to British and Commonwealth readers: that's /berk'lee/, not
   /bark'lee/ as in British Received Pronunciation.

berklix /berk'liks/ n.,adj. [contraction of 'Berkeley
   Unix'] See
                BSD
                . Not used at Berkeley itself. May be more
   common among
                suit
                s attempting to sound like cognoscenti than
   among hackers, who usually just say 'BSD'.

Berzerkeley /b*r-zer'klee/ n. [from 'berserk', via the
   name of a now-deceased record label] Humorous distortion of
   'Berkeley' used esp. to refer to the practices or products of the

                BSD
                 Unix hackers. See
                software bloat
                ,
                Missed'em-five
                ,
                Berkeley Quality Software
                .

   Mainstream use of this term in reference to the cultural and
   political peculiarities of UC Berkeley as a whole has been reported
   from as far back as the 1960s.

beta /bay't*/, /be't*/ or (Commonwealth) /bee't*/ n.
    1. Mostly working, but still under test; usu. used with 'in': 'in
    beta'. In the
                    Real World
                    , systems (hardware or software)
    software often go through two stages of release testing: Alpha
    (in-house) and Beta (out-house?). Beta releases are generally made
    to a small number of lucky (or unlucky), trusted customers.
    2. Anything that is new and experimental. "His girlfriend is in
    beta" means that he is still testing for compatibility and
    reserving judgment. 3. Flaky; dubious; suspect (since beta
    software is notoriously buggy).

    Historical note: More formally, to beta-test is to test a
    pre-release (potentially unreliable) version of a piece of software
    by making it available to selected customers and users. This term
    derives from early 1960s terminology for product cycle checkpoints,
    first used at IBM but later standard throughout the industry.
    'Alpha Test' was the unit, module, or component test phase; 'Beta
    Test' was initial system test. These themselves came from earlier
    A- and B-tests for hardware. The A-test was a feasibility and
    manufacturability evaluation done before any commitment to design
    and development. The B-test was a demonstration that the
    engineering model functioned as specified. The C-test
    (corresponding to today's beta) was the B-test performed on early
    samples of the production design.

BFI /B-F-I/ n. See
                    brute force and ignorance
                    . Also
    encountered in the variants 'BFMI', 'brute force and
    massive ignorance' and 'BFBI' 'brute force and bloody
    ignorance'.

bible n. 1. One of a small number of fundamental source
    books such as
                    Knuth
                     and
                    K&R
                    . 2. The most detailed and
    authoritative reference for a particular language, operating
    system, or other complex software system.

BiCapitalization n. The act said to have been performed on
    trademarks (such as
                    PostScript
                    , NeXT,
                    NeWS
                    , VisiCalc,
    FrameMaker, TK!solver, EasyWriter) that have been raised above the
    ruck of common coinage by nonstandard capitalization. Too many

                    marketroid
                     types think this sort of thing is really cute, even
    the 2,317th time they do it. Compare
                    studlycaps

.

B1FF /bif/ [Usenet] (alt. 'BIFF') n. The most famous

                pseudo
                , and the prototypical
                newbie
                . Articles from B1FF
    feature by all uppercase letters sprinkled liberally with bangs,
    typos, 'cute' misspellings (EVRY BUDY LUVS GOOD OLD BIFF CUZ
    HE"S A K00L DOOD AN HE RITES REEL AWESUM THINGZ IN CAPITULL LETTRS
    LIKE THIS!!!), use (and often misuse) of fragments of
                talk mode
                  abbreviations, a long
                sig block
                  (sometimes even a
                doubled sig
                ),
    and unbounded naivete. B1FF posts articles using his
    elder brother's VIC-20. B1FF's location is a mystery, as his
    articles appear to come from a variety of sites. However,

                BITNET
                  seems to be the most frequent origin. The theory that
    B1FF is a denizen of BITNET is supported by B1FF's (unfortunately
    invalid) electronic mail address: B1FF@BIT.NET.

    [1993: Now It Can Be Told! My spies inform me that B1FF was
    originally created by Joe Talmadge <jat@cup.hp.com>, also the
    author of the infamous and much-plagiarized "Flamer's Bible".
    The BIFF filter he wrote was later passed to Richard Sexton, who
    posted BIFFisms much more widely. Versions have since been posted
    for the amusement of the net at large. -- ESR]

biff /bif/ vt. To notify someone of incoming mail. From
    the BSD utility 'biff(1)', which was in turn named after a
    friendly golden Labrador who used to chase frisbees in the halls at
    UCB while 4.2BSD was in development. There was a legend that it
    had a habit of barking whenever the mailman came, but the author of
    'biff' says this is not true. No relation to
                B1FF
                .

Big Gray Wall n. What faces a
                VMS
                  user searching for
    documentation. A full VMS kit comes on a pallet, the documentation
    taking up around 15 feet of shelf space before the addition of
    layered products such as compilers, databases, multivendor
    networking, and programming tools. Recent (since VMS version 5)
    DEC documentation comes with gray binders; under VMS version 4 the
    binders were orange ('big orange wall'), and under version 3 they
    were blue. See
                VMS
                . Often contracted to 'Gray Wall'.

big iron n. Large, expensive, ultra-fast computers. Used

generally of
                number-crunching
                 supercomputers such as Crays,
    but can include more conventional big commercial IBMish mainframes.
    Term of approval; compare
                heavy metal
                , oppose
                dinosaur
                .

Big Red Switch n.   [IBM] The power switch on a computer,
    esp. the 'Emergency Pull' switch on an IBM
                mainframe
                 or the
    power switch on an IBM PC where it really is large and red.   "This
    !@%$%
                bitty box
                 is hung again; time to hit the Big Red
    Switch."   Sources at IBM report that, in tune with the company's
    passion for
                TLA
                s, this is often abbreviated as 'BRS' (this
    has also become established on FidoNet and in the PC
                clone
                 world).   It is alleged that the emergency pull switch on an IBM
    360/91 actually fired a non-conducting bolt into the main power
    feed; the BRSes on more recent mainframes physically drop a block
    into place so that they can't be pushed back in.   People get fired
    for pulling them, especially inappropriately (see also

                molly-guard
).   Compare
                power cycle
                ,
                three-finger salute
                ,

                120 reset
                ; see also
                scram switch
                .

Big Room, the n.   The extremely large room with the blue
    ceiling and intensely bright light (during the day) or black
    ceiling with lots of tiny night-lights (during the night) found
    outside all computer installations.   "He can't come to the phone
    right now, he's somewhere out in the Big Room."

big win n.   Serendipity.   "Yes, those two physicists
    discovered high-temperature superconductivity in a batch of ceramic
    that had been prepared incorrectly according to their experimental
    schedule.   Small mistake; big win!" See
                win big
                .

big-endian adj.   [From Swift's "Gulliver's Travels" via
    the famous paper "On Holy Wars and a Plea for Peace" by Danny

Cohen, USC/ISI IEN 137, dated April 1, 1980] 1. Describes a
computer architecture in which, within a given multi-byte numeric
representation, the most significant byte has the lowest address
(the word is stored 'big-end-first'). Most processors,
including the IBM 370 family, the

              PDP-10
              , the Motorola
microprocessor families, and most of the various RISC designs
current in late 1995, are big-endian. Big-endian byte order is
also sometimes called 'network order'. See

              little-endian
              ,

              middle-endian
              ,
              NUXI problem
              ,
              swab
              . 2. An

              Internet address
               the wrong way round. Most of the world
follows the Internet standard and writes email addresses starting
with the name of the computer and ending up with the name of the
country. In the U.K. the Joint Networking Team had decided to do
it the other way round before the Internet domain standard was
established; e.g., me@as.pys.bris.ac.uk. Most gateway sites have

              ad-hockery
               in their mailers to handle this, but can still be
confused. In particular, the address above could be in the U.K.
(domain uk) or the domain as (American Samoa) on the
opposite side of the world.

bignum /big'nuhm/ n. [orig. from MIT MacLISP]
   1. [techspeak] A multiple-precision computer representation for
   very large integers. 2. More generally, any very large number.
   "Have you ever looked at the United States Budget? There's
   bignums for you!" 3. [Stanford] In backgammon, large numbers on
   the dice especially a roll of double fives or double sixes (compare

              moby
              , sense 4). See also
              El Camino Bignum
              .

   Sense 1 may require some explanation. Most computer languages
   provide a kind of data called 'integer', but such computer
   integers are usually very limited in size; usually they must be
   smaller than than 2^(31) (2,147,483,648) or (on a

              bitty box
) 2^(15) (32,768). If you want to work
   with numbers larger than that, you have to use floating-point
   numbers, which are usually accurate to only six or seven decimal
   places. Computer languages that provide bignums can perform exact
   calculations on very large numbers, such as 1000! (the factorial

of 1000, which is 1000 times 999 times 998 times ... times 2
times 1). For example, this value for 1000! was computed by the
MacLISP system using bignums:

```
40238726007709377354370243392300398571937486421071
46325437999104299385123986290205920442084869694048
00479988610197196058631666872994808558901323829669
94459099742450408707375991882362772718873251977950
59509952761208749754624970436014182780946464962910
56393887437886487337119181045825783647849977012476
63288983595573543251318532395846307555740911426241
74743493475534286465766116677973966688202912073791
43853719588249808126867838374559731746136085379534
52422158659320192809087829730843139284440328123155
86110369768013573042161687476096758713483120254785
89320767169132448426236131412508780208000261683151
02734182797770478463586817016436502415369139828126
48102130927612448963599287051149649754199093422215
66832572080821333186116811553615836546984046708975
60290095053761647584772842188967964624494516076535
34081989013854424879849599533191017233555566021394
50399736280750137837615307127761926849034352625200
01588853514733161170210396817592151090778801939317
81141945452572238655414610628921879602238389714760
88506276862967146674697562911234082439208160153780
88989396451826324367161676217916890977991190375403
12746222899880051954444142820121873617459926429565
81746628030955570299024324153181617210465832036786
90611726015878352075151628422554026517048330422614
39742869330616908979684825901254583271682264580665
26769958652682272807075781391858178889652208164348
34482599932660433676601769996128318607883861502794
65955131156552036093988180612138558600301435694527
22420634463179746059468257310379008404243243846565
72450144028218852524709351906209290231364932734975
65513958720559654228749774011413346962715422845862
37738753823048386568897646192738381490014076731044
64025989994902222176590433990188601856652648506179
97023561938970178600408118897299183110211712298459
01641921068884387121855646124960798722908519296819
37238864261483965738229112312502418664935314397013
74285319266498753372189406942814341185201580141233
44828015051399694290153483077644569099073152433278
28826986460278986432113908350621709500259738986355
42771967428222487575867657523442202075736305694988
25087968928162753848863396909959826280956121450994
87170124451646126037902930912088908694202851064018
21543994571568059418727489980942547421735824010636
77404595741785160829230135358081840096996372524230
56085590370062427124341690900415369010593398383577
79394109700277534720000000000000000000000000000000
00000000000000000000000000000000000000000000000000
00000000000000000000000000000000000000000000000000
00000000000000000000000000000000000000000000000000
00000000000000000000000000000000000000000000000000
000000000000000000.
```

bigot n.   A person who is religiously attached to a
   particular computer, language, operating system, editor, or other
   tool (see
                    religious issues
).   Usually found with a specifier;
   thus, 'cray bigot', 'ITS bigot', 'APL bigot', 'VMS bigot',
   'Berkeley bigot'.   Real bigots can be distinguished from mere
   partisans or zealots by the fact that they refuse to learn
   alternatives even when the march of time and/or technology is
   threatening to obsolete the favored tool.   It is truly said "You
   can tell a bigot, but you can't tell him much."   Compare

                    weenie
                    .

bit n.   [from the mainstream meaning and 'Binary digIT']
   1. [techspeak] The unit of information; the amount of information
   obtained by asking a yes-or-no question for which the two outcomes
   are equally probable.   2. [techspeak] A computational quantity that
   can take on one of two values, such as true and false or 0 and 1.
   3. A mental flag: a reminder that something should be done
   eventually.   "I have a bit set for you."   (I haven't seen you for
   a while, and I'm supposed to tell or ask you something.)   4. More
   generally, a (possibly incorrect) mental state of belief.   "I have
   a bit set that says that you were the last guy to hack on EMACS."
   (Meaning "I think you were the last guy to hack on EMACS, and what
   I am about to say is predicated on this, so please stop me if this
   isn't true.")

   "I just need one bit from you" is a polite way of indicating that
   you intend only a short interruption for a question that can
   presumably be answered yes or no.

   A bit is said to be 'set' if its value is true or 1, and
   'reset' or 'clear' if its value is false or 0.   One speaks of
   setting and clearing bits.   To
                    toggle
                     or 'invert' a bit is
   to change it, either from 0 to 1 or from 1 to 0.   See also

                    flag
                    ,
                    trit
                    ,
                    mode bit
                    .

   The term 'bit' first appeared in print in the computer-science
   sense in 1949, and seems to have been coined by early computer
   scientist John Tukey.   Tukey records that it evolved over a lunch
   table as a handier alternative to 'bigit' or 'binit'.

bit bang n.   Transmission of data on a serial line, when
   accomplished by rapidly tweaking a single output bit, in software,
   at the appropriate times.   The technique is a simple loop with
   eight OUT and SHIFT instruction pairs for each byte.   Input is more
   interesting.   And full duplex (doing input and output at the same

time) is one way to separate the real hackers from the

                wannabee
                s.

   Bit bang was used on certain early models of Prime computers,
   presumably when UARTs were too expensive, and on archaic Z80 micros
   with a Zilog PIO but no SIO. In an interesting instance of the

                cycle of reincarnation
                , this technique returned to use in the
   early 1990s on some RISC architectures because it consumes such
   an infinitesimal part of the processor that it actually makes sense
   not to have a UART. Compare
                cycle of reincarnation
                .

bit bashing n. (alt. 'bit diddling' or
                bit twiddling
)
   Term used to describe any of several kinds of low-level
   programming characterized by manipulation of
                bit
                ,
                flag
                ,

                nybble
                , and other smaller-than-character-sized pieces of data;
   these include low-level device control, encryption algorithms,
   checksum and error-correcting codes, hash functions, some flavors
   of graphics programming (see
                bitblt
                ), and assembler/compiler
   code generation. May connote either tedium or a real technical
   challenge (more usually the former). "The command decoding for
   the new tape driver looks pretty solid but the bit-bashing for the
   control registers still has bugs." See also
                bit bang
                ,

                mode bit
                .

bit bucket n. 1. The universal data sink (originally, the
   mythical receptacle used to catch bits when they fall off the end
   of a register during a shift instruction). Discarded, lost, or
   destroyed data is said to have 'gone to the bit bucket'. On

                Unix
                , often used for
                /dev/null
                . Sometimes amplified as
   'the Great Bit Bucket in the Sky'. 2. The place where all lost
   mail and news messages eventually go. The selection is performed
   according to
                Finagle's Law

                         ; important mail is much more likely
   to end up in the bit bucket than junk mail, which has an almost
   100% probability of getting delivered. Routing to the bit bucket
   is automatically performed by mail-transfer agents, news systems,
   and the lower layers of the network. 3. The ideal location for all
   unwanted mail responses: "Flames about this article to the bit
   bucket." Such a request is guaranteed to overflow one's mailbox
   with flames. 4. Excuse for all mail that has not been sent. "I
   mailed you those figures last week; they must have landed in the
   bit bucket." Compare
                 black hole
                 .

   This term is used purely in jest. It is based on the fanciful
   notion that bits are objects that are not destroyed but only
   misplaced. This appears to have been a mutation of an earlier term
   'bit box', about which the same legend was current; old-time
   hackers also report that trainees used to be told that when the CPU
   stored bits into memory it was actually pulling them 'out of the
   bit box'. See also
                 chad box
                 .

   Another variant of this legend has it that, as a consequence of the
   'parity preservation law', the number of 1 bits that go to the bit
   bucket must equal the number of 0 bits. Any imbalance results in
   bits filling up the bit bucket. A qualified computer technician
   can empty a full bit bucket as part of scheduled maintenance.

bit decay n. See
                 bit rot
                 . People with a physics
   background tend to prefer this variant for the analogy with
   particle decay. See also
                 computron
                 ,
                 quantum bogodynamics
                 .

bit rot n. Also
                 bit decay
                 . Hypothetical disease the
   existence of which has been deduced from the observation that
   unused programs or features will often stop working after
   sufficient time has passed, even if 'nothing has changed'. The
   theory explains that bits decay as if they were radioactive. As
   time passes, the contents of a file or the code in a program will
   become increasingly garbled.

   There actually are physical processes that produce such effects
   (alpha particles generated by trace radionuclides in ceramic chip
   packages, for example, can change the contents of a computer memory
   unpredictably, and various kinds of subtle media failures can
   corrupt files in mass storage), but they are quite rare (and
   computers are built with error-detecting circuitry to compensate
   for them). The notion long favored among hackers that cosmic
   rays are among the causes of such events turns out to be a myth;

see the

    cosmic rays
     entry for details.

The term

    software rot
     is almost synonymous. Software rot is
the effect, bit rot the notional cause.

bit twiddling n. 1. (pejorative) An exercise in tuning (see

    tune
) in which incredible amounts of time and effort go to
produce little noticeable improvement, often with the result that
the code becomes incomprehensible. 2. Aimless small modification
to a program, esp. for some pointless goal. 3. Approx. syn. for

    bit bashing
    ; esp. used for the act of frobbing the device
control register of a peripheral in an attempt to get it back to a
known state.

bit-paired keyboard n. obs. (alt. 'bit-shift keyboard')
   A non-standard keyboard layout that seems to have originated with
   the Teletype ASR-33 and remained common for several years on early
   computer equipment. The ASR-33 was a mechanical device (see

    EOU
    ), so the only way to generate the character codes from
keystrokes was by some physical linkage. The design of the ASR-33
assigned each character key a basic pattern that could be modified
by flipping bits if the SHIFT or the CTRL key was pressed. In
order to avoid making the thing more of a Rube Goldberg kluge than
it already was, the design had to group characters that shared the
same basic bit pattern on one key.

   Looking at the ASCII chart, we find:

     high low bits
     bits 0000 0001 0010 0011 0100 0101 0110 0111 1000 1001
      010   !   "   # $ %   &   '   (   )
      011   0   1   2   3   4   5   6   7   8   9

   This is why the characters !"#$%&'() appear where they do on a
   Teletype (thankfully, they didn't use shift-0 for space). This was
   not the weirdest variant of the

    QWERTY
     layout widely
seen, by the way; that prize should probably go to one of several
(differing) arrangements on IBM's even clunkier 026 and 029 card
punches.

   When electronic terminals became popular, in the early 1970s, there
   was no agreement in the industry over how the keyboards should be
   laid out. Some vendors opted to emulate the Teletype keyboard,
   while others used the flexibility of electronic circuitry to make
   their product look like an office typewriter. These alternatives

became known as 'bit-paired' and 'typewriter-paired' keyboards. To
a hacker, the bit-paired keyboard seemed far more logical -- and
because most hackers in those days had never learned to touch-type,
there was little pressure from the pioneering users to adapt
keyboards to the typewriter standard.

The doom of the bit-paired keyboard was the large-scale
introduction of the computer terminal into the normal office
environment, where out-and-out technophobes were expected to use
the equipment. The 'typewriter-paired' standard became universal,
'bit-paired' hardware was quickly junked or relegated to dusty
corners, and both terms passed into disuse.

bitblt /bit'blit/ n.   [from
                BLT
                , q.v.] 1. Any of a
family of closely related algorithms for moving and copying
rectangles of bits between main and display memory on a bit-mapped
device, or between two areas of either main or display memory (the
requirement to do the
                Right Thing
                 in the case of overlapping
source and destination rectangles is what makes BitBlt tricky).
2. Synonym for
                blit
                 or
                BLT
                . Both uses are borderline
techspeak.

BITNET /bit'net/ n.   [acronym: Because It's Time NETwork]
   Everybody's least favorite piece of the network (see
                network, the
).
   The BITNET hosts are a collection of IBM dinosaurs and
   VAXen (the latter with lobotomized comm hardware) that communicate
   using 80-character
                EBCDIC
                 card images (see
                eighty-column mind
                );
   thus, they tend to mangle the headers and text of
   third-party traffic from the rest of the ASCII/
                RFC
                -822 world
   with annoying regularity. BITNET was also notorious as the
   apparent home of
                B1FF
                .

bits n.pl. 1. Information. Examples: "I need some bits
   about file formats." ("I need to know about file formats.")
   Compare
                core dump
                , sense 4. 2. Machine-readable
   representation of a document, specifically as contrasted with
   paper: "I have only a photocopy of the Jargon File; does anyone

know where I can get the bits?". See
softcopy
,

source of all good bits
 See also
bit
.

bitty box /bit'ee boks/ n. 1. A computer sufficiently
small, primitive, or incapable as to cause a hacker acute
claustrophobia at the thought of developing software on or for it.
Especially used of small, obsolescent, single-tasking-only personal
machines such as the Atari 800, Osborne, Sinclair, VIC-20, TRS-80,
or IBM PC. 2. [Pejorative] More generally, the opposite of
'real computer' (see
Get a real computer!
). See also

mess-dos
,
toaster
, and
toy
.

bixie /bik'see/ n. Variant
emoticon
s used on BIX
(the Byte Information eXchange). The
smiley
 bixie is <@_@>,
apparently intending to represent two cartoon eyes and a mouth. A
few others have been reported.

black art n. A collection of arcane, unpublished, and (by
implication) mostly ad-hoc techniques developed for a particular
application or systems area (compare
black magic
). VLSI
design and compiler code optimization were (in their beginnings)
considered classic examples of black art; as theory developed they
became
deep magic
, and once standard textbooks had been
written, became merely
heavy wizardry
. The huge proliferation
of formal and informal channels for spreading around new
computer-related technologies during the last twenty years has made
both the term 'black art' and what it describes less common than
formerly. See also
voodoo programming
.

black hole n. What a piece of email or netnews has fallen
into if it disappears mysteriously between its origin and

destination sites (that is, without returning a
                bounce message
).
"I think there's a black hole at foovax!" conveys
suspicion that site foovax has been dropping a lot of stuff on
the floor lately (see
                drop on the floor
). The implied
metaphor of email as interstellar travel is interesting in itself.
Compare
                bit bucket
                .

black magic n. A technique that works, though nobody really
    understands why. More obscure than
                voodoo programming
                , which
    may be done by cookbook. Compare also
                black art
                ,

                deep magic
                , and
                magic number
                  (sense 2).

blammo v. [Oxford Brookes University and alumni, UK] To
    forcibly remove someone from any interactive system, especially
    talker systems. The operators, who may remain hidden, may 'blammo'
a
    user who is misbehaving. Very similar to MIT
                gun
                ; in fact,
    the 'blammo-gun' is a notional device used to 'blammo' someone.
    While in actual fact the only incarnation of the blammo-gun is the
    command used to forcibly eject a user, operators speak of different
    levels of blammo-gun fire; e.g., a blammo-gun to 'stun' will
    temporarily remove someone, but a blammo-gun set to 'maim' will
    stop someone coming back on for a while.

blargh /blarg/ n. [MIT] The opposite of
                ping
                , sense
    5; an exclamation indicating that one has absorbed or is emitting a
    quantum of unhappiness. Less common than
                ping
                .

blast 1. vt.,n. Synonym for
                BLT
                , used esp. for large
    data sends over a network or comm line. Opposite of
                snarf
                .
    Usage: uncommon. The variant 'blat' has been reported. 2. vt.
    [HP/Apollo] Synonymous with
                nuke

```
                          (sense 3).  Sometimes the
   message 'Unable to kill all processes.  Blast them (y/n)?'
   would appear in the command window upon logout.

blat n.  1. Syn.
                blast
                , sense 1.  2. See
                thud
                .

bletch /blech/ interj.  [from Yiddish/German 'brechen', to
   vomit, poss.  via comic-strip exclamation 'blech'] Term
   of disgust.  Often used in "Ugh, bletch".  Compare
                barf
                .

bletcherous /blech'*-r*s/ adj.  Disgusting in design or
   function; esthetically unappealing.  This word is seldom used of
   people.  "This keyboard is bletcherous!" (Perhaps the keys don't
   work very well, or are misplaced.)  See
                losing
                ,

                cretinous
                ,
                bagbiting
                ,
                bogus
                , and
                random
                .  The
   term
                bletcherous
                 applies to the esthetics of the thing so
   described; similarly for
                cretinous
                .  By contrast, something
   that is 'losing' or 'bagbiting' may be failing to meet
   objective criteria.  See also
                bogus
                 and
                random
                , which
   have richer and wider shades of meaning than any of the above.

blink v.,n.  To use a navigator or off-line message reader
   to minimize time spent on-line to a commercial network service.
   As of late 1994, this term was said to be in wide use in the U.K.,
   but is rare or unknown in the US.

blinkenlights /blink'*n-li:tz/ n.  Front-panel diagnostic
   lights on a computer, esp. a
                dinosaur
                .  Derives from the
   last word of the famous blackletter-Gothic sign in mangled
   pseudo-German that once graced about half the computer rooms in the
   English-speaking world.  One version ran in its entirety as
```

follows:

ACHTUNG! ALLES LOOKENSPEEPERS! Das
computermachine ist nicht fuer gefingerpoken und mittengrabben.
Ist easy schnappen der springenwerk, blowenfusen und poppencorken
mit spitzensparken. Ist nicht fuer gewerken bei das dumpkopfen.
Das rubbernecken sichtseeren keepen das cotten-pickenen hans in
das pockets muss; relaxen und watchen das blinkenlichten.

This silliness dates back at least as far as 1959 at Stanford
University and had already gone international by the early 1960s,
when it was reported at London University's ATLAS computing site.
There are several variants of it in circulation, some of which
actually do end with the word 'blinkenlights'.

In an amusing example of turnabout-is-fair-play, German hackers
have developed their own versions of the blinkenlights poster in
fractured English, one of which is reproduced here:

ATTENTION

This room is fullfilled mit special electronische equippment.
Fingergrabbing and pressing the cnoeppkes from the computers is
allowed for die experts only! So all the "lefthanders" stay away
and do not disturben the brainstorming von here working
intelligencies. Otherwise you will be out thrown and kicked
anderswhere! Also: please keep still and only watchen
astaunished the blinkenlights.

See also
            geef
            .

Old-time hackers sometimes get nostalgic for blinkenlights because
they were so much more fun to look at than a blank panel. Sadly,
very few computers still have them (the three LEDs on a PC keyboard
certainly don't count). The obvious reasons (cost of wiring, cost
of front-panel cutouts, almost nobody needs or wants to interpret
machine-register states on the fly anymore) are only part of the
story. Another part of it is that radio-frequency leakage from the
lamp wiring was beginning to be a problem as far back as transistor
machines. But the most fundamental fact is that there are very few
signals slow enough to blink an LED these days! With slow CPUs,
you could watch the bus register or instruction counter tick, but
at 33/66/150MHz it's all a blur.

blit /blit/ vt. 1. To copy a large array of bits from one
part of a computer's memory to another part, particularly when the
memory is being used to determine what is shown on a display
screen. "The storage allocator picks through the table and copies
the good parts up into high memory, and then blits it all back down
again." See
            bitblt
            ,
            BLT

```
                ,
                dd
                ,
                cat
                ,
                blast
                ,

                snarf
                .  More generally, to perform some operation (such as
    toggling) on a large array of bits while moving them.  2. Sometimes
    all-capitalized as 'BLIT': an early experimental bit-mapped
    terminal designed by Rob Pike at Bell Labs, later commercialized as
    the AT&T 5620.  (The folk etymology from 'Bell Labs Intelligent
    Terminal' is incorrect.  Its creators liked to claim that "Blit"
    stood for the Bacon, Lettuce, and Interactive Tomato.)
```

blitter /blit'r/ n. A special-purpose chip or hardware
    system built to perform
                blit
                 operations, esp. used for fast
    implementation of bit-mapped graphics. The Commodore Amiga and a
    few other micros have these, but sine 1990 the trend is away from
    them (however, see
                cycle of reincarnation
). Syn.
                raster blaster
                .

blivet /bliv'*t/ n. [allegedly from a World War II
    military term meaning "ten pounds of manure in a five-pound bag"]
    1. An intractable problem. 2. A crucial piece of hardware that
    can't be fixed or replaced if it breaks. 3. A tool that has been
    hacked over by so many incompetent programmers that it has become
    an unmaintainable tissue of hacks. 4. An out-of-control but
    unkillable development effort. 5. An embarrassing bug that pops up
    during a customer demo. 6. In the subjargon of computer security
    specialists, a denial-of-service attack performed by hogging
    limited resources that have no access controls (for example, shared
    spool space on a multi-user system).

    This term has other meanings in other technical cultures; among
    experimental physicists and hardware engineers of various kinds it
    seems to mean any random object of unknown purpose (similar to
    hackish use of
                frob
). It has also been used to describe an
    amusing trick-the-eye drawing resembling a three-pronged fork that
    appears to depict a three-dimensional object until one realizes
    that the parts fit together in an impossible way.

BLOB 1. n. [acronym: Binary Large OBject] Used by database
    people to refer to any random large block of bits that needs to be
    stored in a database, such as a picture or sound file. The
    essential point about a BLOB is that it's an object that cannot be
    interpreted within the database itself. 2. v. To
                mailbomb

                        someone by sending a BLOB him/her; esp. used as a mild threat.
   "If that program crashes again, I'm going to BLOB the core dump to
   you."

block   [from process scheduling terminology in OS theory]
   1. vi. To delay or sit idle while waiting for something. "We're
   blocking until everyone gets here." Compare
                    busy-wait
                .
   2. 'block on' vt. To block, waiting for (something). "Lunch is
   blocked on Phil's arrival."

block transfer computations n. [from the television series
   "Dr. Who"] Computations so fiendishly subtle and complex
   that they could not be performed by machines. Used to refer to any
   task that should be expressible as an algorithm in theory, but
   isn't.

Bloggs Family, the n. An imaginary family consisting of
   Fred and Mary Bloggs and their children. Used as a standard
   example in knowledge representation to show the difference between
   extensional and intensional objects. For example, every occurrence
   of "Fred Bloggs" is the same unique person, whereas occurrences
   of "person" may refer to different people. Members of the Bloggs
   family have been known to pop up in bizarre places such as the DEC
   Telephone Directory. Compare
                    Mbogo, Dr. Fred
                    .

blow an EPROM /bloh *n ee'prom/ v. (alt. 'blast an
   EPROM', 'burn an EPROM') To program a read-only memory, e.g.
   for use with an embedded system. This term arose because the
   programming process for the Programmable Read-Only Memories (PROMs)
   that preceded present-day Erasable Programmable Read-Only Memories
   (EPROMs) involved intentionally blowing tiny electrical fuses on
   the chip. The usage lives on (it's too vivid and expressive to
   discard) even though the write process on EPROMs is nondestructive.

blow away vt. To remove (files and directories) from
   permanent storage, generally by accident. "He reformatted the
   wrong partition and blew away last night's netnews." Oppose

                    nuke
                    .

blow out vi. [prob. from mining and tunneling jargon] Of
   software, to fail spectacularly; almost as serious as

                    crash and burn
                    . See
                    blow past
                    ,
                    blow up
                    ,
                    die horribly
                    .

blow past vt. To
                blow out
                 despite a safeguard. "The
    server blew past the 5K reserve buffer."

blow up vi. 1. [scientific computation] To become unstable.
    Suggests that the computation is diverging so rapidly that it will
    soon overflow or at least go
                nonlinear
                . 2. Syn.
                blow out
                .

BLT /B-L-T/, /bl*t/ or (rarely) /belt/ n.,vt. Synonym
    for
                blit
                . This is the original form of
                blit
                 and the
    ancestor of
                bitblt
                . It referred to any large bit-field copy
    or move operation (one resource-intensive memory-shuffling
    operation done on pre-paged versions of ITS, WAITS, and TOPS-10 was
    sardonically referred to as 'The Big BLT'). The jargon usage has
    outlasted the
                PDP-10
                 BLock Transfer instruction from which

                BLT
                 derives; nowadays, the assembler mnemonic
                BLT
                 almost
    always means 'Branch if Less Than zero'.

Blue Book n. 1. Informal name for one of the three standard
    references on the page-layout and graphics-control language

                PostScript
                 ("PostScript Language Tutorial and Cookbook",
    Adobe Systems, Addison-Wesley 1985, QA76.73.P67P68, ISBN
    0-201-10179-3); the other three official guides are known as the

                Green Book
                , the
                Red Book
                , and the
                White Book
                 (sense
    2). 2. Informal name for one of the three standard references on
    Smalltalk: "Smalltalk-80: The Language and its
    Implementation", David Robson, Addison-Wesley 1983, QA76.8.S635G64,
    ISBN 0-201-11371-63 (this book also has green and red siblings).
    3. Any of the 1988 standards issued by the CCITT's ninth plenary
    assembly. These include, among other things, the X.400 email spec
    and the Group 1 through 4 fax standards. See also
                book titles

.

blue box n. 1. obs. Once upon a time, before all-digital switches
   made it possible for the phone companies to move them out of the
   audible range, one could actually hear the switching tones used to
   route long-distance calls. Early
                 phreaker
                 s built devices
   called 'blue boxes' that could reproduce these tones, which could
   be used to commandeer portions of the phone network. (This was not
   as hard as it may sound; one early phreak acquired the sobriquet
   'Captain Crunch' after he proved that he could generate switching
   tones with a plastic whistle pulled out of a box of Captain Crunch
   cereal!) 2. n. An
                 IBM
                  machine, especially a large (non-PC)
   one.

Blue Glue n. [IBM] IBM's SNA (Systems Network
   Architecture), an incredibly
                 losing
                  and
                 bletcherous
                   communications protocol widely favored at commercial shops that
   don't know any better. The official IBM definition is "that which
   binds blue boxes together." See
                 fear and loathing
                 . It may
   not be irrelevant that
                 Blue Glue
                  is the trade name of a 3M
   product that is commonly used to hold down the carpet squares to
   the removable panel floors common in
                 dinosaur pen
                 s. A
   correspondent at U. Minn. reports that the CS department there has
   about 80 bottles of the stuff hanging about, so they often refer to
   any messy work to be done as 'using the blue glue'.

blue goo n. Term for 'police'
                 nanobot
                 s intended to
   prevent
                 gray goo
                 , denature hazardous waste, destroy pollution,
   put ozone back into the stratosphere, prevent halitosis, and
   promote truth, justice, and the American way, etc. The term
   'Blue Goo' can be found in Dr. Seuss's "Fox In Socks" to
   refer to a substance much like bubblegum. 'Would you like to
   chew blue goo, sir?'. See
                 nanotechnology
                 .

blue wire n. [IBM] Patch wires added to circuit boards at
   the factory to correct design or fabrication problems. These may
   be necessary if there hasn't been time to design and qualify
   another board version. Compare

```
                   purple wire
                   ,
                   red wire
                   ,
                   yellow wire
                   .
```

blurgle /bler'gl/ n.   [UK] Spoken
                   metasyntactic variable
                   , to
    indicate some text that is obvious from context, or
    which is already known. If several words are to be replaced,
    blurgle may well be doubled or trebled. "To look for something in
    several files use 'grep string blurgle blurgle'." In each case,
    "blurgle blurgle" would be understood to be replaced by the file
    you wished to search. Compare
                   mumble
                   , sense 7.

BNF /B-N-F/ n. 1. [techspeak] Acronym for 'Backus-Naur
    Form', a metasyntactic notation used to specify the syntax of
    programming languages, command sets, and the like. Widely used for
    language descriptions but seldom documented anywhere, so that it
    must usually be learned by osmosis from other hackers. Consider
    this BNF for a U.S. postal address:

        <postal-address> ::= <name-part> <street-address> <zip-part>

        <personal-part> ::= <name> | <initial> "."

        <name-part> ::= <personal-part> <last-name> [<jr-part>] <EOL>
                     | <personal-part> <name-part>

        <street-address> ::= [<apt>] <house-num> <street-name> <EOL>

        <zip-part> ::= <town-name> "," <state-code> <ZIP-code> <EOL>

    This translates into English as: "A postal-address consists of a
    name-part, followed by a street-address part, followed by a
    zip-code part. A personal-part consists of either a first name or
    an initial followed by a dot. A name-part consists of either: a
    personal-part followed by a last name followed by an optional
    'jr-part' (Jr., Sr., or dynastic number) and end-of-line, or a
    personal part followed by a name part (this rule illustrates the
    use of recursion in BNFs, covering the case of people who use
    multiple first and middle names and/or initials). A street address
    consists of an optional apartment specifier, followed by a street
    number, followed by a street name. A zip-part consists of a
    town-name, followed by a comma, followed by a state code, followed
    by a ZIP-code followed by an end-of-line." Note that many things
    (such as the format of a personal-part, apartment specifier, or
    ZIP-code) are left unspecified. These are presumed to be obvious
    from context or detailed somewhere nearby. See also
                   parse
                   .
    2. Any of a number number of variants and extensions of BNF proper,
```

```
     possibly containing some or all of the
               regexp
                wildcards such
     as '*' or '+'.  In fact the example above isn't the pure
     form invented for the Algol-60 report; it uses '[]', which was
     introduced a few years later in IBM's PL/I definition but is now
     universally recognized.  3. In
               science-fiction fandom
               , a
     'Big-Name Fan' (someone famous or notorious).  Years ago a fan
     started handing out black-on-green BNF buttons at SF conventions;
     this confused the hacker contingent terribly.
```

```
boa [IBM] n.  Any one of the fat cables that lurk under the
     floor in a
               dinosaur pen
               .  Possibly so called because they
     display a ferocious life of their own when you try to lay them
     straight and flat after they have been coiled for some time.  It is
     rumored within IBM that channel cables for the 370 are limited to
     200 feet because beyond that length the boas get dangerous -- and
     it is worth noting that one of the major cable makers uses the
     trademark 'Anaconda'.
```

```
board n.  1. In-context synonym for
               bboard
               ; sometimes
     used even for Usenet newsgroups (but see usage note under

               bboard
               , sense 1).  2. An electronic circuit board.
```

```
boat anchor n.  1. Like
               doorstop
                but more severe;
     implies that the offending hardware is irreversibly dead or
     useless.  "That was a working motherboard once.  One lightning
     strike later, instant boat anchor!"  2. A person who just takes up
     space.  3. Obsolete but still working hardware, especially
     when used of an old S100-bus hobbyist system; originally a term of
     annoyance, but became more and more affectionate as the hardware
     became more and more obsolete.
```

```
bodysurf code n  A program or segment of code written
     quickly in the heat of inspiration without the benefit of formal
     design or deep thought.  Like its namesake sport, the result is
     too often a wipeout that leaves the programmer eating sand.
```

```
BOF /B-O-F/ or /bof/ n.  Abbreviation for the phrase
     "Birds Of a Feather" (flocking together), an informal discussion
     group and/or bull session scheduled on a conference program.  It is
     not clear where or when this term originated, but it is now
     associated with the USENIX conferences for Unix techies and was
     already established there by 1984.  It was used earlier than that
     at DECUS conferences and is reported to have been common at SHARE
     meetings as far back as the early 1960s.
```

bogo-sort /boh'goh-sort'/ n. (var. 'stupid-sort') The
    archetypical perversely awful algorithm (as opposed to

                bubble sort
                , which is merely the generic *bad* algorithm).
    Bogo-sort is equivalent to repeatedly throwing a deck of cards in
    the air, picking them up at random, and then testing whether they
    are in order. It serves as a sort of canonical example of
    awfulness. Looking at a program and seeing a dumb algorithm, one
    might say "Oh, I see, this program uses bogo-sort." Compare

                bogus
                ,
                brute force
                ,
                Lasherism
                .

bogometer /boh-gom'-*t-er/ n. A notional instrument for
    measuring
                bogosity
                . Compare the 'wankometer' described in
    the
                wank
                 entry; see also
                bogus
                .

bogon /boh'gon/ n. [by analogy with
    proton/electron/neutron, but doubtless reinforced after 1980 by the
    similarity to Douglas Adams's 'Vogons'; see the
                Bibliography
                    in Appendix C and note that Arthur Dent actually mispronounces
    'Vogons' as 'Bogons' at one point] 1. The elementary particle of
    bogosity (see
                quantum bogodynamics
). For instance, "the
    Ethernet is emitting bogons again" means that it is broken or
    acting in an erratic or bogus fashion. 2. A query packet sent from
    a TCP/IP domain resolver to a root server, having the reply bit set
    instead of the query bit. 3. Any bogus or incorrectly formed
    packet sent on a network. 4. By synecdoche, used to refer to any
    bogus thing, as in "I'd like to go to lunch with you but I've got
    to go to the weekly staff bogon". 5. A person who is bogus or
    who says bogus things. This was historically the original usage,
    but has been overtaken by its derivative senses 1--4. See also

                bogosity
                ,
                bogus
                ; compare
                psyton
                ,
                fat electrons
                ,

                magic smoke

.

The bogon has become the type case for a whole bestiary of nonce
particle names, including the 'clutron' or 'cluon' (indivisible
particle of cluefulness, obviously the antiparticle of the bogon)
and the futon (elementary particle of
                randomness
                , or sometimes
of lameness). These are not so much live usages in themselves as
examples of a live meta-usage: that is, it has become a standard
joke or linguistic maneuver to "explain" otherwise mysterious
circumstances by inventing nonce particle names. And these imply
nonce particle theories, with all their dignity or lack thereof (we
might note parenthetically that this is a generalization from
"(bogus particle) theories" to "bogus (particle theories)"!).
Perhaps such particles are the modern-day equivalents of trolls and
wood-nymphs as standard starting-points around which to construct
explanatory myths. Of course, playing on an existing word (as in
the 'futon') yields additional flavor. Compare
                magic smoke
                .

bogon filter /boh'gon fil'tr/ n. Any device, software or
    hardware, that limits or suppresses the flow and/or emission of
    bogons. "Engineering hacked a bogon filter between the Cray and
    the VAXen, and now we're getting fewer dropped packets." See also

                bogosity
                ,
                bogus
                .

bogon flux /boh'gon fluhks/ n. A measure of a supposed
    field of
                bogosity
                 emitted by a speaker, measured by a

                bogometer
                ; as a speaker starts to wander into increasing
    bogosity a listener might say "Warning, warning, bogon flux is
    rising". See
                quantum bogodynamics
                .

bogosity /boh-go's*-tee/ n. 1. The degree to which
    something is
                bogus
                . At CMU, bogosity is measured with a

                bogometer
                ; in a seminar, when a speaker says something bogus,
    a listener might raise his hand and say "My bogometer just
    triggered". More extremely, "You just pinned my bogometer"
    means you just said or did something so outrageously bogus that it
    is off the scale, pinning the bogometer needle at the highest
    possible reading (one might also say "You just redlined my
    bogometer"). The agreed-upon unit of bogosity is the

                microLenat
                . 2. The potential field generated by a
                bogon flux
                ;
    see
                quantum bogodynamics
                . See also
                bogon flux
                ,

                bogon filter
                ,
                bogus
                .

bogotify /boh-go't*-fi:/ vt. To make or become bogus. A
    program that has been changed so many times as to become completely
    disorganized has become bogotified. If you tighten a nut too hard
    and strip the threads on the bolt, the bolt has become bogotified
    and you had better not use it any more. This coinage led to the
    notional 'autobogotiphobia' defined as 'the fear of becoming
    bogotified'; but is not clear that the latter has ever been
    'live' jargon rather than a self-conscious joke in jargon about
    jargon. See also
                bogosity
                ,
                bogus
                .

bogue out /bohg owt/ vi. To become bogus, suddenly and
    unexpectedly. "His talk was relatively sane until somebody asked
    him a trick question; then he bogued out and did nothing but

                flame
                 afterwards." See also
                bogosity
                ,
                bogus
                .

bogus adj. 1. Non-functional. "Your patches are bogus."
    2. Useless. "OPCON is a bogus program." 3. False. "Your
    arguments are bogus." 4. Incorrect. "That algorithm is bogus."
    5. Unbelievable. "You claim to have solved the halting problem
    for Turing Machines? That's totally bogus." 6. Silly. "Stop
    writing those bogus sagas."

    Astrology is bogus. So is a bolt that is obviously about to break.
    So is someone who makes blatantly false claims to have solved a
    scientific problem. (This word seems to have some, but not all, of
    the connotations of
                random
                 -- mostly the negative ones.)

    It is claimed that 'bogus' was originally used in the hackish sense
    at Princeton in the late 1960s. It was spread to CMU and Yale by

Michael Shamos, a migratory Princeton alumnus. A glossary of bogus
words was compiled at Yale when the word was first popularized (see

autobogotiphobia
 under
bogotify
). The word spread into
hackerdom from CMU and MIT. By the early 1980s it was also
current in something like the hackish sense in West Coast teen
slang, and it had gone mainstream by 1985. A correspondent from
Cambridge reports, by contrast, that these uses of 'bogus' grate on
British nerves; in Britain the word means, rather specifically,
'counterfeit', as in "a bogus 10-pound note".

Bohr bug /bohr buhg/ n. [from quantum physics] A repeatable

bug
; one that manifests reliably under a possibly unknown but
well-defined set of conditions. Antonym of
heisenbug
; see also

mandelbug
,
schroedinbug
.

boink /boynk/ [Usenet: variously ascribed to the TV
series "Cheers" "Moonlighting", and "Soap"] 1. To
have sex with; compare
bounce
, sense 3. (This is mainstream
slang.) In Commonwealth hackish the variant 'bonk' is more
common. 2. After the original Peter Korn 'Boinkon'
Usenet
parties, used for almost any net social gathering, e.g., ←
Miniboink,
a small boink held by Nancy Gillett in 1988; Minniboink, a Boinkcon
in Minnesota in 1989; Humpdayboinks, Wednesday get-togethers held
in the San Francisco Bay Area. Compare
@-party
. 3. Var of
'bonk'; see
bonk/oif
.

bomb 1. v. General synonym for
crash
 (sense 1) except
that it is not used as a noun; esp. used of software or OS
failures. "Don't run Empire with less than 32K stack, it'll
bomb." 2. n.,v. Atari ST and Macintosh equivalents of a Unix
'panic' or Amiga
guru
 (sense 2), in which icons of little
black-powder bombs or mushroom clouds are displayed, indicating
that the system has died. On the Mac, this may be accompanied by a

decimal (or occasionally hexadecimal) number indicating what went
wrong, similar to the Amiga
                guru meditation
                 number.

                MS-DOS
                 machines tend to get
                locked up
                 in this situation.

bondage-and-discipline language A language (such as

                Pascal
                ,
                Ada
                , APL, or Prolog) that, though ostensibly
    general-purpose, is designed so as to enforce an author's theory of
    'right programming' even though said theory is demonstrably
    inadequate for systems hacking or even vanilla general-purpose
    programming. Often abbreviated 'B&D'; thus, one may speak of
    things "having the B&D nature". See
                Pascal
                ; oppose

                languages of choice
                .

bonk/oif /bonk/, /oyf/ interj. In the
                MUD
                 community, it has become traditional to express pique or ←
                    censure by
    'bonking' the offending person. Convention holds that one should
    acknowledge a bonk by saying 'oif!' and there is a myth to the
    effect that failing to do so upsets the cosmic bonk/oif balance,
    causing much trouble in the universe. Some MUDs have implemented
    special commands for bonking and oifing. See also
                talk mode
                .

book titles There is a tradition in hackerdom of
    informally tagging important textbooks and standards documents with
    the dominant color of their covers or with some other conspicuous
    feature of the cover. Many of these are described in this lexicon
    under their own entries. See
                Aluminum Book
                ,
                Blue Book
                ,

                Camel Book
                ,
                Cinderella Book
                ,
                Devil Book
                ,
                Dragon Book
                ,

Green Book

,

Orange Book

,

Pink-Shirt Book

,

Purple Book

,

Red Book

,

Silver Book

,

White Book

,

Wizard Book

,

Yellow Book

, and

bible

; see also

rainbow series
. Since about 1983 this tradition has gotten a
boost from the popular O'Reilly Associates line of technical books,
which usually feature some kind of exotic animal on the
cover.

boot v.,n. [techspeak; from 'by one's bootstraps'] To
load and initialize the operating system on a machine. This usage
is no longer jargon (having passed into techspeak) but has given
rise to some derivatives that are still jargon.

The derivative 'reboot' implies that the machine hasn't been down
for long, or that the boot is a
bounce
(sense 4) intended to
clear some state of
wedgitude
. This is sometimes used of
human thought processes, as in the following exchange: "You've
lost me." "OK, reboot. Here's the theory...."

This term is also found in the variants 'cold boot' (from
power-off condition) and 'warm boot' (with the CPU and all
devices already powered up, as after a hardware reset or software
crash).

Another variant: 'soft boot', reinitialization of only part of a
system, under control of other software still running: "If
you're running the
mess-dos
emulator, control-alt-insert will
cause a soft-boot of the emulator, while leaving the rest of the
system running."

Opposed to this there is 'hard boot', which connotes hostility
towards or frustration with the machine being booted: "I'll have
to hard-boot this losing Sun." "I recommend booting it
hard." One often hard-boots by performing a
                 power cycle
                 .

Historical note: this term derives from 'bootstrap loader', a short
program that was read in from cards or paper tape, or toggled in
from the front panel switches. This program was always very short
(great efforts were expended on making it short in order to
minimize the labor and chance of error involved in toggling it in),
but was just smart enough to read in a slightly more complex
program (usually from a card or paper tape reader), to which it
handed control; this program in turn was smart enough to read the
application or operating system from a magnetic tape drive or disk
drive. Thus, in successive steps, the computer 'pulled itself up
by its bootstraps' to a useful operating state. Nowadays the
bootstrap is usually found in ROM or EPROM, and reads the first
stage in from a fixed location on the disk, called the 'boot
block'. When this program gains control, it is powerful enough to
load the actual OS and hand control over to it.

bottom feeder n. Syn. for
                 slopsucker
                 , derived from the
   fishermen's and naturalists' term for finny creatures who subsist
   on the primordial ooze.

bottom-up implementation n. Hackish opposite of the
   techspeak term 'top-down design'. It is now received wisdom in
   most programming cultures that it is best to design from higher
   levels of abstraction down to lower, specifying sequences of action
   in increasing detail until you get to actual code. Hackers often
   find (especially in exploratory designs that cannot be closely
   specified in advance) that it works best to *build* things in
   the opposite order, by writing and testing a clean set of primitive
   operations and then knitting them together.

bounce v. 1. [perhaps by analogy to a bouncing check] An
   electronic mail message that is undeliverable and returns an error
   notification to the sender is said to 'bounce'. See also

                 bounce message
                 . 2. [Stanford] To play volleyball. The
   now-demolished
                 D. C. Power Lab
                 building used by the Stanford
   AI Lab in the 1970s had a volleyball court on the front lawn. From
   5 P.M. to 7 P.M. was the scheduled maintenance time for the
   computer, so every afternoon at 5 would come over the intercom the
   cry: "Now hear this: bounce, bounce!", followed by Brian McCune
   loudly bouncing a volleyball on the floor outside the offices of
   known volleyballers. 3. To engage in sexual intercourse; prob.
   from the expression 'bouncing the mattress', but influenced by
   Roo's psychosexually loaded "Try bouncing me, Tigger!" from the

"Winnie-the-Pooh" books. Compare
                boink
                . 4. To casually
    reboot a system in order to clear up a transient problem. Reported
    primarily among
                VMS
                users. 5. [VM/CMS programmers]
    Automatic warm-start of a machine after an error.   "I
    logged on this morning and found it had bounced 7 times during the
    night" 6. [IBM] To
                power cycle
                 a peripheral in order to reset
    it.

bounce message n. [Unix] Notification message returned to sender
    by a site unable to relay
                email
                 to the intended
                Internet address
                   recipient or the next link in a
                bang path
                 (see

                bounce
                , sense 1). Reasons might include a nonexistent or
    misspelled username or a
                down
                 relay site. Bounce messages can
    themselves fail, with occasionally ugly results; see

                sorcerer's apprentice mode
                 and
                software laser
                . The terms
    'bounce mail' and 'barfmail' are also common.

boustrophedon n. [from a Greek word for turning like an ox
    while plowing] An ancient method of writing using alternate
    left-to-right and right-to-left lines. This term is actually
    philologists' techspeak and typesetters' jargon. Erudite hackers
    use it for an optimization performed by some computer typesetting
    software and moving-head printers. The adverbial form
    'boustrophedonically' is also found (hackers purely love
    constructions like this).

box n. 1. A computer; esp. in the construction 'foo
    box' where foo is some functional qualifier, like
    'graphics', or the name of an OS (thus, 'Unix box', 'MS-DOS
    box', etc.) "We preprocess the data on Unix boxes before handing
    it up to the mainframe." 2. [IBM] Without qualification but
    within an SNA-using site, this refers specifically to an IBM
    front-end processor or FEP /F-E-P/. An FEP is a small computer
    necessary to enable an IBM
                mainframe
                 to communicate beyond the
    limits of the
                dinosaur pen

                         . Typically used in expressions
    like the cry that goes up when an SNA network goes down: "Looks
    like the
                  box
                   has fallen over." (See
                  fall over
                  .) See also

                  IBM
                  ,
                  fear and loathing
                  ,
                  fepped out
                  ,
                  Blue Glue
                  .

boxed comments n. Comments (explanatory notes attached to
    program instructions) that occupy several lines by themselves; so
    called because in assembler and C code they are often surrounded by
    a box in a style something like this:

        /**
         *
         * This is a boxed comment in C style
         *
         **/

    Common variants of this style omit the asterisks in column 2 or add
    a matching row of asterisks closing the right side of the box. The
    sparest variant omits all but the comment delimiters themselves;
    the 'box' is implied. Oppose
                  winged comments
                  .

boxen /bok'sn/ pl.n. [by analogy with
                  VAXen
                  ]
    Fanciful plural of
                  box
                   often encountered in the phrase 'Unix
    boxen', used to describe commodity
                  Unix
                   hardware. The
    connotation is that any two Unix boxen are interchangeable.

boxology /bok-sol'*-jee/ n. Syn.
                  ASCII art
                  . This
    term implies a more restricted domain, that of box-and-arrow
    drawings. "His report has a lot of boxology in it." Compare

                  macrology
                  .

bozotic /boh-zoh'tik/ or /boh-zo'tik/ adj. [from the name of
    a TV clown even more losing than Ronald McDonald] Resembling

or having the quality of a bozo; that is, clownish, ludicrously
wrong, unintentionally humorous. Compare
            wonky
            ,

            demented
            . Note that the noun 'bozo' occurs in slang, but
the mainstream adjectival form would be 'bozo-like' or (in New
England) 'bozoish'.

BQS /B-Q-S/ adj. Syn.
            Berkeley Quality Software
            .

brain dump n. The act of telling someone everything one
   knows about a particular topic or project. Typically used when
   someone is going to let a new party maintain a piece of code.
   Conceptually analogous to an operating system
            core dump
             in
   that it saves a lot of useful
            state
             before an exit. "You'll
   have to give me a brain dump on FOOBAR before you start your new
   job at HackerCorp." See
            core dump
             (sense 4). At Sun, this
   is also known as 'TOI' (transfer of information).

brain fart n. The actual result of a
            braino
            , as
   opposed to the mental glitch that is the braino itself. E.g.,
   typing 'dir' on a Unix box after a session with DOS.

brain-damaged 1. [generalization of 'Honeywell Brain
   Damage' (HBD), a theoretical disease invented to explain certain
   utter cretinisms in Honeywell
            Multics
            ] adj. Obviously wrong;

            cretinous
            ;
            demented
            . There is an implication that the
   person responsible must have suffered brain damage, because he
   should have known better. Calling something brain-damaged is
   really bad; it also implies it is unusable, and that its failure to
   work is due to poor design rather than some accident. "Only six
   monocase characters per file name? Now *that's*
   brain-damaged!" 2. [esp. in the Mac world] May refer to free
   demonstration software that has been deliberately crippled in some
   way so as not to compete with the commercial product it is intended
   to sell. Syn.
            crippleware
            .

brain-dead adj. Brain-damaged in the extreme. It tends to
   imply terminal design failure rather than malfunction or simple
   stupidity. "This comm program doesn't know how to send a break
   -- how brain-dead!"

braino /bray'no/ n. Syn. for
               thinko
               . See also

               brain fart
               .

branch to Fishkill n. [IBM: from the location of one of the
   corporation's facilities] Any unexpected jump in a program that
   produces catastrophic or just plain weird results. See

               jump off into never-never land
               ,
               hyperspace
               .

bread crumbs n. Debugging statements inserted into a
   program that emit output or log indicators of the program's

               state
                to a file so you can see where it dies or pin down the
   cause of surprising behavior. The term is probably a reference to
   the Hansel and Gretel story from the Brothers Grimm; in several
   variants, a character leaves a trail of bread crumbs so as not to
   get lost in the woods.

break 1. vt. To cause to be
               broken
                (in any sense).
   "Your latest patch to the editor broke the paragraph commands."
   2. v. (of a program) To stop temporarily, so that it may debugged.
   The place where it stops is a 'breakpoint'. 3. [techspeak]
   vi. To send an RS-232 break (two character widths of line high)
   over a serial comm line. 4. [Unix] vi. To strike whatever key
   currently causes the tty driver to send SIGINT to the current
   process. Normally, break (sense 3), delete or
               control-C
                does
   this. 5. 'break break' may be said to interrupt a conversation
   (this is an example of verb doubling). This usage comes from radio
   communications, which in turn probably came from landline
   telegraph/teleprinter usage, as badly abused in the Citizen's Band
   craze a few years ago.

break-even point n. In the process of implementing a new
   computer language, the point at which the language is sufficiently
   effective that one can implement the language in itself. That is,
   for a new language called, hypothetically, FOOGOL, one has reached
   break-even when one can write a demonstration compiler for FOOGOL
   in FOOGOL, discard the original implementation language, and
   thereafter use working versions of FOOGOL to develop newer ones.
   This is an important milestone; see

                    MFTL
                     .

    Since this entry was first written, several correspondents have
    reported that there actually was a compiler for a tiny Algol-like
    language called Foogol floating around on various
                    VAXen
                     in the
    early and mid-1980s.

breath-of-life packet n.   [XEROX PARC] An Ethernet packet
    that contains bootstrap (see
                    boot
) code, periodically sent out
    from a working computer to infuse the 'breath of life' into any
    computer on the network that has happened to crash. Machines
    depending on such packets have sufficient hardware or firmware code
    to wait for (or request) such a packet during the reboot process.
    See also
                    dickless workstation
                     .

    The notional 'kiss-of-death packet', with a function
    complementary to that of a breath-of-life packet, is recommended
    for dealing with hosts that consume too many network resources.
    Though 'kiss-of-death packet' is usually used in jest, there is
    at least one documented instance of an Internet subnet with limited
    address-table slots in a gateway machine in which such packets were
    routinely used to compete for slots, rather like Christmas shoppers
    competing for scarce parking spaces.

breedle n.   See
                    feep
                     .

bring X to its knees v.   To present a machine, operating
    system, piece of software, or algorithm with a load so extreme or

                    pathological
                     that it grinds to a halt. "To bring a MicroVAX
    to its knees, try twenty users running
                    vi
                     -- or four running

                    EMACS
                    ." Compare
                    hog
                     .

brittle adj.   Said of software that is functional but easily
    broken by changes in operating environment or configuration, or by
    any minor tweak to the software itself. Also, any system that
    responds inappropriately and disastrously to abnormal but expected
    external stimuli; e.g., a file system that is usually totally
    scrambled by a power failure is said to be brittle. This term is
    often used to describe the results of a research effort that were
    never intended to be robust, but it can be applied to commercially

developed software, which displays the quality far more often than
it ought to. Oppose
              robust
              .

broadcast storm n. An incorrect packet broadcast on a
network that causes most hosts to respond all at once, typically
with wrong answers that start the process over again. See

              network meltdown
              ; compare
              mail storm
              .

brochureware n. Planned but non-existent product like

              vaporware
              , but with the added implication that marketing is
actively selling and promoting it (they've printed brochures).
Brochureware is often deployed as a strategic weapon; the idea is
to con customers into not committing to an existing product of the
competition's. It is a safe bet that when a brochureware product
finally becomes real, it will be more expensive than and inferior
to the alternatives that had been available for years.

broken adj. 1. Not working properly (of programs).
2. Behaving strangely; especially (when used of people) exhibiting
extreme depression.

broken arrow n. [IBM] The error code displayed on line 25
of a 3270 terminal (or a PC emulating a 3270) for various kinds of
protocol violations and "unexpected" error conditions (including
connection to a
              down
               computer). On a PC, simulated with
'->/_', with the two center characters overstruck.

Note: to appreciate this term fully, it helps to know that 'broken
arrow' is also military jargon for an accident involving nuclear
weapons....

broket /broh'k*t/ or /broh'ket'/ n. [by analogy with
'bracket': a 'broken bracket'] Either of the characters
'<' and '>', when used as paired enclosing delimiters.
This word originated as a contraction of the phrase 'broken
bracket', that is, a bracket that is bent in the middle. (At MIT,
and apparently in the
              Real World
               as well, these are usually
called
              angle brackets
              .)

Brooks's Law prov. "Adding manpower to a late software
project makes it later" -- a result of the fact that the expected
advantage from splitting work among N programmers is
O(N) (that is, proportional to N), but the complexity

and communications cost associated with coordinating and then
merging their work is O(N^2) (that is, proportional to the
square of N). The quote is from Fred Brooks, a manager of
IBM's OS/360 project and author of "The Mythical Man-Month"
(Addison-Wesley, 1975, ISBN 0-201-00650-2), an excellent early book
on software engineering. The myth in question has been most
tersely expressed as "Programmer time is fungible" and Brooks
established conclusively that it is not. Hackers have never
forgotten his advice; too often,
            management
             still does. See
also
            creationism
            ,
            second-system effect
            ,
            optimism
            .

browser   A program specifically designed to help users view
   and navigate hypertext, on-line documentation, or a database.
   While this general sense has been present in jargon for a long
   time, the proliferation of browsers for the World Wide Web after
   1992 has made it much more popular and provided a central or
   default meaning of the word previously lacking in hacker usage.
   Nowadays, if someone mentions using a 'browser' without
   qualification, one may assume it is a Web browser.

BRS /B-R-S/ n. Syn.
            Big Red Switch
            . This
   abbreviation is fairly common on-line.

brute force adj. Describes a primitive programming style,
   one in which the programmer relies on the computer's processing
   power instead of using his or her own intelligence to simplify the
   problem, often ignoring problems of scale and applying naive
   methods suited to small problems directly to large ones. The term
   can also be used in reference to programming style: brute-force
   programs are written in a heavyhanded, tedious way, full of
   repetition and devoid of any elegance or useful abstraction (see
   also
            brute force and ignorance
).

   The
            canonical
             example of a brute-force algorithm is associated
   with the 'traveling salesman problem' (TSP), a classical

            NP-
            hard problem: Suppose a person is in, say, Boston, and
   wishes to drive to N other cities. In what order should the
   cities be visited in order to minimize the distance travelled? The
   brute-force method is to simply generate all possible routes and
   compare the distances; while guaranteed to work and simple to
   implement, this algorithm is clearly very stupid in that it

considers even obviously absurd routes (like going from Boston to
Houston via San Francisco and New York, in that order). For very
small N it works well, but it rapidly becomes absurdly
inefficient when N increases (for N = 15, there are
already 1,307,674,368,000 possible routes to consider, and for
N = 1000 -- well, see
                bignum
). Sometimes,
unfortunately, there is no better general solution than brute
force. See also
                NP-
                .

A more simple-minded example of brute-force programming is finding
the smallest number in a large list by first using an existing
program to sort the list in ascending order, and then picking the
first number off the front.

Whether brute-force programming should actually be considered
stupid or not depends on the context; if the problem is not
terribly big, the extra CPU time spent on a brute-force solution
may cost less than the programmer time it would take to develop a
more 'intelligent' algorithm. Additionally, a more intelligent
algorithm may imply more long-term complexity cost and bug-chasing
than are justified by the speed improvement.

Ken Thompson, co-inventor of Unix, is reported to have uttered the
epigram "When in doubt, use brute force". He probably intended
this as a
                ha ha only serious
                , but the original Unix kernel's
preference for simple, robust, and portable algorithms over

                brittle
                'smart' ones does seem to have been a significant
factor in the success of that OS. Like so many other tradeoffs in
software design, the choice between brute force and complex,
finely-tuned cleverness is often a difficult one that requires both
engineering savvy and delicate esthetic judgment.

brute force and ignorance n. A popular design technique at
    many software houses --
                brute force
                 coding unrelieved by any
    knowledge of how problems have been previously solved in elegant
    ways. Dogmatic adherence to design methodologies tends to
    encourage this sort of thing. Characteristic of early
                larval stage
                    programming; unfortunately, many never outgrow it. Often
    abbreviated BFI: "Gak, they used a
                bubble sort
                ! That's
    strictly from BFI." Compare
                bogosity
                .

BSD /B-S-D/ n. [abbreviation for 'Berkeley Software

    Distribution'] a family of
                Unix
                 versions for the
                DEC

                VAX
                 and PDP-11 developed by Bill Joy and others at

                Berzerkeley
                 starting around 1980, incorporating paged virtual
    memory, TCP/IP networking enhancements, and many other features.
    The BSD versions (4.1, 4.2, and 4.3) and the commercial versions
    derived from them (SunOS, ULTRIX, and Mt. Xinu) held the technical
    lead in the Unix world until AT&T's successful standardization
    efforts after about 1986, and are still widely popular. Note that
    BSD versions going back to 2.9 are often referred to by their
    version numbers, without the BSD prefix. See
                4.2
                ,
                Unix
                ,

                USG Unix
                .

BUAF // n. [abbreviation, from alt.fan.warlord] Big
    Ugly ASCII Font -- a special form of
                ASCII art
                . Various
    programs exist for rendering text strings into block, bloob, and
    pseudo-script fonts in cells between four and six character cells
    on a side; this is smaller than the letters generated by older

                banner
                 (sense 2) programs. These are sometimes used to render
    one's name in a
                sig block
                , and are critically referred to as
    'BUAF's. See
                warlording
                .

BUAG // n. [abbreviation, from alt.fan.warlord] Big
    Ugly ASCII Graphic. Pejorative term for ugly
                ASCII art
                ,
    especially as found in
                sig block
                s. For some reason, mutations
    of the head of Bart Simpson are particularly common in the least
    imaginative
                sig block
                s. See
                warlording
                .

bubble sort n. Techspeak for a particular sorting technique

in which pairs of adjacent values in the list to be sorted are
compared and interchanged if they are out of order; thus, list
entries 'bubble upward' in the list until they bump into one
with a lower sort value. Because it is not very good relative to
other methods and is the one typically stumbled on by
                naive
                    and untutored programmers, hackers consider it the
                canonical
                    example of a naive algorithm. The canonical example of a ←
                        really
bad algorithm is
                bogo-sort
                . A bubble sort might be
used out of ignorance, but any use of bogo-sort could issue only
from brain damage or willful perversity.

bucky bits /buh'kee bits/ n. 1. obs. The bits produced by
    the CONTROL and META shift keys on a SAIL keyboard (octal 200 and
    400 respectively), resulting in a 9-bit keyboard character set.
    The MIT AI TV (Knight) keyboards extended this with TOP and
    separate left and right CONTROL and META keys, resulting in a
    12-bit character set; later, LISP Machines added such keys as
    SUPER, HYPER, and GREEK (see
                space-cadet keyboard
). 2. By
    extension, bits associated with 'extra' shift keys on any
    keyboard, e.g., the ALT on an IBM PC or command and option keys on
    a Macintosh.

    It has long been rumored that 'bucky bits' were named for
    Buckminster Fuller during a period when he was consulting at
    Stanford. Actually, bucky bits were invented by Niklaus Wirth when
    he was at Stanford in 1964--65; he first suggested the idea
    of an EDIT key to set the 8th bit of an otherwise 7-bit ASCII
    character). It seems that, unknown to Wirth, certain Stanford
    hackers had privately nicknamed him 'Bucky' after a prominent
    portion of his dental anatomy, and this nickname transferred to the
    bit. Bucky-bit commands were used in a number of editors written
    at Stanford, including most notably TV-EDIT and NLS.

    The term spread to MIT and CMU early and is now in general use.
    Ironically, Wirth himself remained unaware of its derivation for
    nearly 30 years, until GLS dug up this history in early 1993! See

                double bucky
                ,
                quadruple bucky
                .

buffer chuck n. Shorter and ruder syn. for
                buffer overflow
                .

buffer overflow n. What happens when you try to stuff more
    data into a buffer (holding area) than it can handle. This may be
    due to a mismatch in the processing rates of the producing and
    consuming processes (see

                    overrun
                     and
                    firehose syndrome
                    ),
    or because the buffer is simply too small to hold all the data that
    must accumulate before a piece of it can be processed. For
    example, in a text-processing tool that
                    crunch
                    es a line at a
    time, a short line buffer can result in
                    lossage
                     as input from
    a long line overflows the buffer and trashes data beyond it. Good
    defensive programming would check for overflow on each character
    and stop accepting data when the buffer is full up. The term is
    used of and by humans in a metaphorical sense. "What time did I
    agree to meet you? My buffer must have overflowed." Or "If I
    answer that phone my buffer is going to overflow." See also

                    spam
                    ,
                    overrun screw
                    .

bug n. An unwanted and unintended property of a program or
    piece of hardware, esp. one that causes it to malfunction.
    Antonym of
                    feature
                    . Examples: "There's a bug in the editor:
    it writes things out backwards." "The system crashed because of
    a hardware bug." "Fred is a winner, but he has a few bugs"
    (i.e., Fred is a good guy, but he has a few personality problems).

    Historical note: Admiral Grace Hopper (an early computing pioneer
    better known for inventing
                    COBOL
) liked to tell a story in
    which a technician solved a
                    glitch
                     in the Harvard Mark II
    machine by pulling an actual insect out from between the contacts
    of one of its relays, and she subsequently promulgated
                    bug
                     in
    its hackish sense as a joke about the incident (though, as she was
    careful to admit, she was not there when it happened). For many
    years the logbook associated with the incident and the actual bug
    in question (a moth) sat in a display case at the Naval Surface
    Warfare Center (NSWC). The entire story, with a picture of the
    logbook and the moth taped into it, is recorded in the "Annals
    of the History of Computing", Vol. 3, No. 3 (July 1981),
    pp. 285--286.

    The text of the log entry (from September 9, 1947), reads "1545
    Relay #70 Panel F (moth) in relay. First actual case of bug being
    found". This wording establishes that the term was already
    in use at the time in its current specific sense -- and Hopper

herself reports that the term 'bug' was regularly applied to
problems in radar electronics during WWII.

Indeed, the use of 'bug' to mean an industrial defect was already
established in Thomas Edison's time, and a more specific and rather
modern use can be found in an electrical handbook from 1896
("Hawkin's New Catechism of Electricity", Theo. Audel & Co.)
which says: "The term 'bug' is used to a limited extent to
designate any fault or trouble in the connections or working of
electric apparatus." It further notes that the term is "said to
have originated in quadruplex telegraphy and have been transferred
to all electric apparatus."

The latter observation may explain a common folk etymology of the
term; that it came from telephone company usage, in which "bugs in
a telephone cable" were blamed for noisy lines. Though this
derivation seems to be mistaken, it may well be a distorted memory
of a joke first current among *telegraph* operators more than
a century ago!

Or perhaps not a joke. Historians of the field inform us that the
term "bug" was regularly used in the early days of telegraphy to
refer to a variety of semi-automatic telegraphy keyers that would
send a string of dots if you held them down. In fact, the
Vibroplex keyers (which were among the most common of this type)
even had a graphic of a beetle on them! While the ability to send
repeated dots automatically was very useful for professional morse
code operators, these were also significantly trickier to use than
the older manual keyers, and it could take some practice to ensure
one didn't introduce extraneous dots into the code by holding the
key down a fraction too long. In the hands of an inexperienced
operator, a Vibroplex "bug" on the line could mean that a lot
of garbled Morse would soon be coming your way.

Actually, use of 'bug' in the general sense of a disruptive event
goes back to Shakespeare! In the first edition of Samuel Johnson's
dictionary one meaning of 'bug' is "A frightful object; a
walking spectre"; this is traced to 'bugbear', a Welsh term for
a variety of mythological monster which (to complete the circle)
has recently been reintroduced into the popular lexicon through
fantasy role-playing games.

In any case, in jargon the word almost never refers to insects.
Here is a plausible conversation that never actually happened:

"There is a bug in this ant farm!"

"What do you mean? I don't see any ants in it."

"That's the bug."

A careful discussion of the etymological issues can be found in a
paper by Fred R. Shapiro, 1987, "Entomology of the Computer Bug:
History and Folklore", American Speech 62(4):376-378.

[There has been a widespread myth that the original bug was moved
to the Smithsonian, and an earlier version of this entry so

asserted. A correspondent who thought to check discovered that the
bug was not there. While investigating this in late 1990, your
editor discovered that the NSWC still had the bug, but had
unsuccessfully tried to get the Smithsonian to accept it -- and
that the present curator of their History of American Technology
Museum didn't know this and agreed that it would make a worthwhile
exhibit. It was moved to the Smithsonian in mid-1991, but due to
space and money constraints has not yet been exhibited. Thus, the
process of investigating the original-computer-bug bug fixed it in
an entirely unexpected way, by making the myth true! -- ESR]

bug-compatible adj. Said of a design or revision that has
been badly compromised by a requirement to be compatible with

            fossil
            s or
            misfeature
            s in other programs or (esp.)
previous releases of itself. "MS-DOS 2.0 used \ as a path
separator to be bug-compatible with some cretin's choice of / as an
option character in 1.0."

bug-for-bug compatible n. Same as
            bug-compatible
            , with
the additional implication that much tedious effort went into
ensuring that each (known) bug was replicated.

bug-of-the-month club n. A mythical club which users of

            sendmail
             belong to; this was coined on the Usenet newsgroup
comp.security.unix at a time when sendmail security holes, which
allowed outside
            cracker
            s access to the system, were being
uncovered at an alarming rate, forcing sysadmins to update very
often. Also, more completely, 'fatal security bug-of-the-month
club'.

buglix /buhg'liks/ n. Pejorative term referring to

            DEC
            's ULTRIX operating system in its earlier *severely*
buggy versions. Still used to describe ULTRIX, but without nearly
so much venom. Compare
            AIDX
            ,
            HP-SUX
            ,
            Nominal Semidestructor
            ,
            Telerat
            ,
            sun-stools
            .

bulletproof adj. Used of an algorithm or implementation
   considered extremely
                robust
                ; lossage-resistant; capable of
   correctly recovering from any imaginable exception condition -- a
   rare and valued quality. Syn.
                armor-plated
                .

bum 1. vt. To make highly efficient, either in time or
   space, often at the expense of clarity. "I managed to bum three
   more instructions out of that code." "I spent half the night
   bumming the interrupt code." In
                elder days
                , John McCarthy
   (inventor of
                LISP
) used to compare some efficiency-obsessed
   hackers among his students to "ski bums"; thus, optimization
   became "program bumming", and eventually just "bumming". 2. To
   squeeze out excess; to remove something in order to improve
   whatever it was removed from (without changing function; this
   distinguishes the process from a
                featurectomy
). 3. n. A small
   change to an algorithm, program, or hardware device to make it more
   efficient. "This hardware bum makes the jump instruction
   faster." Usage: now uncommon, largely superseded by v.
                tune
                   (and n.
                tweak
                ,
                hack
                ), though none of these exactly
   capture sense 2. All these uses are rare in Commonwealth hackish,
   because in the parent dialects of English 'bum' is a rude synonym
   for 'buttocks'.

bump vt. Synonym for increment. Has the same meaning as
   C's ++ operator. Used esp. of counter variables, pointers, and
   index dummies in 'for', 'while', and 'do-while'
   loops.

burble v. [from Lewis Carroll's "Jabberwocky"] Like

                flame
                , but connotes that the source is truly clueless and
   ineffectual (mere flamers can be competent). A term of deep
   contempt. "There's some guy on the phone burbling about how he
   got a DISK FULL error and it's all our comm software's fault."
   This is mainstream slang in some parts of England.

buried treasure n. A surprising piece of code found in some
   program. While usually not wrong, it tends to vary from

                crufty

                to

                bletcherous

                , and has lain undiscovered only
    because it was functionally correct, however horrible it is. Used
    sarcastically, because what is found is anything *but*
    treasure. Buried treasure almost always needs to be dug up and
    removed. "I just found that the scheduler sorts its queue using

                bubble sort

                ! Buried treasure!"

burn-in period n. 1. A factory test designed to catch
    systems with

                marginal

                 components before they get out the door;
    the theory is that burn-in will protect customers by outwaiting the
    steepest part of the

                bathtub curve

                 (see

                infant mortality

).
    2. A period of indeterminate length in which a person
    using a computer is so intensely involved in his project that he
    forgets basic needs such as food, drink, sleep, etc. Warning:
    Excessive burn-in can lead to burn-out. See

                hack mode

                ,

                larval stage

                .

burst page n. Syn.

                banner

                , sense 1.

busy-wait vi. Used of human behavior, conveys that the
    subject is busy waiting for someone or something, intends to move
    instantly as soon as it shows up, and thus cannot do anything else
    at the moment. "Can't talk now, I'm busy-waiting till Bill gets
    off the phone."

    Technically, 'busy-wait' means to wait on an event by

                spin

                ning through a tight or timed-delay loop that polls for
    the event on each pass, as opposed to setting up an interrupt
    handler and continuing execution on another part of the task. This
    is a wasteful technique, best avoided on time-sharing systems where
    a busy-waiting program may

                hog

                 the processor.

buzz vi. 1. Of a program, to run with no indication of
    progress and perhaps without guarantee of ever finishing; esp.
    said of programs thought to be executing tight loops of code. A
    program that is buzzing appears to be

                catatonic

, but never
gets out of catatonia, while a buzzing loop may eventually end of
its own accord. "The program buzzes for about 10 seconds trying
to sort all the names into order." See
                spin
                ; see also

                grovel
                . 2. [ETA Systems] To test a wire or printed circuit
trace for continuity by applying an AC rather than DC signal. Some
wire faults will pass DC tests but fail a buzz test. 3. To process
an array or list in sequence, doing the same thing to each element.
"This loop buzzes through the tz array looking for a terminator
type."

BWQ /B-W-Q/ n. [IBM: abbreviation, 'Buzz Word Quotient']
   The percentage of buzzwords in a speech or documents. Usually
   roughly proportional to
                bogosity
                . See
                TLA
                .

by hand adv. 1. Said of an operation (especially a
   repetitive, trivial, and/or tedious one) that ought to be performed
   automatically by the computer, but which a hacker instead has to
   step tediously through. "My mailer doesn't have a command to
   include the text of the message I'm replying to, so I have to do it
   by hand." This does not necessarily mean the speaker has to
   retype a copy of the message; it might refer to, say, dropping into
   a subshell from the mailer, making a copy of one's mailbox file,
   reading that into an editor, locating the top and bottom of the
   message in question, deleting the rest of the file, inserting '>'
   characters on each line, writing the file, leaving the editor,
   returning to the mailer, reading the file in, and later remembering
   to delete the file. Compare
                eyeball search
                . 2. By extension,
   writing code which does something in an explicit or low-level way
   for which a presupplied library routine ought to have been
   available. "This cretinous B-tree library doesn't supply a decent
   iterator, so I'm having to walk the trees by hand."

byte /bi:t/ n. [techspeak] A unit of memory or data equal to
   the amount used to represent one character; on modern architectures
   this is usually 8 bits, but may be 9 on 36-bit machines. Some
   older architectures used 'byte' for quantities of 6 or 7 bits, and
   the PDP-10 supported 'bytes' that were actually bitfields of
   1 to 36 bits! These usages are now obsolete, and even 9-bit bytes
   have become rare in the general trend toward power-of-2 word sizes.

   Historical note: The term was coined by Werner Buchholz in 1956
   during the early design phase for the IBM Stretch computer;
   originally it was described as 1 to 6 bits (typical I/O equipment
   of the period used 6-bit chunks of information). The move to an
   8-bit byte happened in late 1956, and this size was later adopted
   and promulgated as a standard by the System/360. The word was

coined by mutating the word 'bite' so it would not be
accidentally misspelled as

    bit
    . See also
    nybble
    .

bytesexual /bi:t'sek'shu-*l/ adj. Said of hardware,
    denotes willingness to compute or pass data in either

        big-endian
         or
        little-endian
         format (depending,
    presumably, on a
        mode bit
         somewhere). See also

        NUXI problem
        .

bzzzt, wrong /bzt rong/ [Usenet/Internet] From a Robin
    Williams routine in the movie "Dead Poets Society" spoofing
    radio or TV quiz programs, such as *Truth or Consequences*,
    where an incorrect answer earns one a blast from the buzzer and
    condolences from the interlocutor. A way of expressing mock-rude
    disagreement, usually immediately following an included quote from
    another poster. The less abbreviated "*Bzzzzt*, wrong, but thank
    you for playing" is also common; capitalization and emphasis of
    the buzzer sound varies.

1.8   C

        C n. 1. The third letter of the English alphabet. 2. ASCII
    1000011. 3. The name of a programming language designed by Dennis
    Ritchie during the early 1970s and immediately used to reimplement

        Unix
        ; so called because many features derived from an earlier
    compiler named 'B' in commemoration of *its* parent, BCPL.
    (BCPL was in turn descended from an earlier Algol-derived language,
    CPL.) Before Bjarne Stroustrup settled the question by designing
    C++, there was a humorous debate over whether C's successor should
    be named 'D' or 'P'. C became immensely popular outside Bell Labs
    after about 1980 and is now the dominant language in systems and
    microcomputer applications programming. See also

        languages of choice
        ,
        indent style
        .

    C is often described, with a mixture of fondness and disdain
    varying according to the speaker, as "a language that combines

all the elegance and power of assembly language with all the
readability and maintainability of assembly language".

C Programmer's Disease n. The tendency of the undisciplined
   C programmer to set arbitrary but supposedly generous static limits
   on table sizes (defined, if you're lucky, by constants in header
   files) rather than taking the trouble to do proper dynamic storage
   allocation. If an application user later needs to put 68 elements
   into a table of size 50, the afflicted programmer reasons that he
   or she can easily reset the table size to 68 (or even as much as
   70, to allow for future expansion) and recompile. This gives the
   programmer the comfortable feeling of having made the effort to
   satisfy the user's (unreasonable) demands, and often affords the
   user multiple opportunities to explore the marvelous consequences
   of
                fandango on core
                . In severe cases of the disease, the
   programmer cannot comprehend why each fix of this kind seems only
   to further disgruntle the user.

calculator [Cambridge] n. Syn. for
                bitty box
                .

Camel Book n. Universally recognized nickname for the book
   "Programming Perl", by Larry Wall and Randall L. Schwartz,
   O'Reilly Associates 1991, ISBN 0-93715-64-1. The definitive
   reference on
                Perl
                .

can vt. To abort a job on a time-sharing system. Used
   esp. when the person doing the deed is an operator, as in
   "canned from the
                console
                ". Frequently used in an imperative
   sense, as in "Can that print job, the LPT just popped a
   sprocket!" Synonymous with
                gun
                . It is said that the ASCII
   character with mnemonic CAN (0011000) was used as a kill-job
   character on some early OSes. Alternatively, this term may derive
   from mainstream slang 'canned' for being laid off or fired.

can't happen The traditional program comment for code
   executed under a condition that should never be true, for example a
   file size computed as negative. Often, such a condition being true
   indicates data corruption or a faulty algorithm; it is almost
   always handled by emitting a fatal error message and terminating or
   crashing, since there is little else that can be done. Some case
   variant of "can't happen" is also often the text emitted if the
   'impossible' error actually happens! Although "can't happen"
   events are genuinely infrequent in production code, programmers
   wise enough to check for them habitually are often surprised at how
   frequently they are triggered during development and how many
   headaches checking for them turns out to head off. See also

                         firewall code
                          (sense 2).

candygrammar n.   A programming-language grammar that is
   mostly
                 syntactic sugar
                 ; the term is also a play on
    'candygram'.
                 COBOL
                 , Apple's Hypertalk language, and a lot
    of the so-called '4GL' database languages share this property.
    The usual intent of such designs is that they be as English-like as
    possible, on the theory that they will then be easier for unskilled
    people to program. This intention comes to grief on the reality
    that syntax isn't what makes programming hard; it's the mental
    effort and organization required to specify an algorithm precisely
    that costs. Thus the invariable result is that 'candygrammar'
    languages are just as difficult to program in as terser ones, and
    far more painful for the experienced hacker.

    [The overtones from the old Chevy Chase skit on Saturday Night Live
    should not be overlooked. This was a "Jaws" parody.
    Someone lurking outside an apartment door tries all kinds of bogus
    ways to get the occupant to open up, while ominous music plays in
    the background. The last attempt is a half-hearted "Candygram!"
    When the door is opened, a shark bursts in and chomps the poor
    occupant. There is a moral here for those attracted to
    candygrammars. Note that, in many circles, pretty much the same
    ones who remember Monty Python sketches, all it takes is the word
    "Candygram!", suitably timed, to get people rolling on the
    floor. -- GLS]

canonical adj. [historically, 'according to religious law']
    The usual or standard state or manner of something. This word has
    a somewhat more technical meaning in mathematics. Two formulas
    such as 9 + x and x + 9 are said to be equivalent
    because they mean the same thing, but the second one is in
    'canonical form' because it is written in the usual way, with the
    highest power of x first. Usually there are fixed rules you
    can use to decide whether something is in canonical form. The
    jargon meaning, a relaxation of the technical meaning, acquired its
    present loading in computer-science culture largely through its
    prominence in Alonzo Church's work in computation theory and
    mathematical logic (see
                 Knights of the Lambda Calculus
).
    Compare
                 vanilla
                 .

    This word has an interesting history. Non-technical academics do
    not use the adjective 'canonical' in any of the senses defined
    above with any regularity; they do however use the nouns 'canon'
    and 'canonicity' (not **canonicalness or **canonicality). The
    'canon' of a given author is the complete body of authentic works
    by that author (this usage is familiar to Sherlock Holmes fans as
    well as to literary scholars). '*The* canon' is the body of

works in a given field (e.g., works of literature, or of art, or of
music) deemed worthwhile for students to study and for scholars to
investigate.

The word 'canon' derives ultimately from the Greek
'kanon'
(akin to the English 'cane') referring to a reed. Reeds were used
for measurement, and in Latin and later Greek the word 'canon'
meant a rule or a standard. The establishment of a canon of
scriptures within Christianity was meant to define a standard or a
rule for the religion. The above non-techspeak academic usages
stem from this instance of a defined and accepted body of work.
Alongside this usage was the promulgation of 'canons' ('rules')
for the government of the Catholic Church. The techspeak usages
("according to religious law") derive from this use of the Latin
'canon'.

Hackers invest this term with a playfulness that makes an ironic
contrast with its historical meaning. A true story: One Bob
Sjoberg, new at the MIT AI Lab, expressed some annoyance at the
incessant use of jargon. Over his loud objections, GLS and RMS
made a point of using as much of it as possible in his presence,
and eventually it began to sink in. Finally, in one conversation,
he used the word 'canonical' in jargon-like fashion without
thinking. Steele: "Aha! We've finally got you talking jargon
too!" Stallman: "What did he say?" Steele: "Bob just used
'canonical' in the canonical way."

Of course, canonicality depends on context, but it is implicitly
defined as the way *hackers* normally expect things to be.
Thus, a hacker may claim with a straight face that 'according to
religious law' is *not* the canonical meaning of
'canonical'.

card walloper n. An EDP programmer who grinds out batch
   programs that do stupid things like print people's paychecks.
   Compare
                code grinder
                . See also
                punched card
                ,
                eighty-column mind
                .

careware /keir'weir/ n. A variety of
                shareware
                 for
   which either the author suggests that some payment be made to a
   nominated charity or a levy directed to charity is included on top
   of the distribution charge. Syn.
                charityware
                ; compare
                crippleware
                , sense 2.

cargo cult programming n. A style of (incompetent)
   programming dominated by ritual inclusion of code or program
   structures that serve no real purpose. A cargo cult programmer
   will usually explain the extra code as a way of working around some
   bug encountered in the past, but usually neither the bug nor the
   reason the code apparently avoided the bug was ever fully
   understood (compare
                shotgun debugging
                ,
                voodoo programming
).

   The term 'cargo cult' is a reference to aboriginal religions that
   grew up in the South Pacific after World War II. The practices of
   these cults center on building elaborate mockups of airplanes and
   military style landing strips in the hope of bringing the return of
   the god-like airplanes that brought such marvelous cargo during the
   war. Hackish usage probably derives from Richard Feynman's
   characterization of certain practices as "cargo cult science" in
   his book "Surely You're Joking, Mr. Feynman" (W. W. Norton
   & Co, New York 1985, ISBN 0-393-01921-7).

cascade n. 1. A huge volume of spurious error-message
   output produced by a compiler with poor error recovery. Too
   frequently, one trivial syntax error (such as a missing ')' or
   '}') throws the parser out of synch so that much of the remaining
   program text is interpreted as garbaged or ill-formed. 2. A chain
   of Usenet followups, each adding some trivial variation or riposte
   to the text of the previous one, all of which is reproduced in the
   new message; an
                include war
                 in which the object is to create a
   sort of communal graffito.

case and paste n. [from 'cut and paste'] 1. The addition of a new

                feature
                 to an existing system by selecting the code from an
   existing feature and pasting it in with minor changes. Common in
   telephony circles because most operations in a telephone switch are
   selected using 'case' statements. Leads to
                software bloat
                .

   In some circles of EMACS users this is called 'programming by
   Meta-W', because Meta-W is the EMACS command for copying a block of
   text to a kill buffer in preparation to pasting it in elsewhere.
   The term is condescending, implying that the programmer is acting
   mindlessly rather than thinking carefully about what is required to
   integrate the code for two similar cases.

   At DEC, this is sometimes called 'clone-and-hack' coding.

casters-up mode n. [IBM, prob. fr. slang belly up] Yet
   another synonym for 'broken' or 'down'. Usually connotes a
   major failure. A system (hardware or software) which is 'down'
   may be already being restarted before the failure is noticed,

whereas one which is 'casters up' is usually a good excuse to
take the rest of the day off (as long as you're not responsible for
fixing it).

casting the runes n. What a
                guru
                 does when you ask him
or her to run a particular program and type at it because it never
works for anyone else; esp. used when nobody can ever see what
the guru is doing different from what J. Random Luser does.
Compare
                incantation
                ,
                runes
                ,
                examining the entrails
                ;
also see the AI koan about Tom Knight in "
                AI Koans
                "
(Appendix A).

    A correspondent from England tells us that one of ICL's most
    talented systems designers used to be called out occasionally to
    service machines which the
                field circus
                 had given up on.
    Since he knew the design inside out, he could often find faults
    simply by listening to a quick outline of the symptoms. He used to
    play on this by going to some site where the field circus had just
    spent the last two weeks solid trying to find a fault, and
    spreading a diagram of the system out on a table top. He'd then
    shake some chicken bones and cast them over the diagram, peer at
    the bones intently for a minute, and then tell them that a certain
    module needed replacing. The system would start working again
    immediately upon the replacement.

cat [from 'catenate' via
                Unix
                 'cat(1)'] vt.
    1. [techspeak] To spew an entire file to the screen or some other
    output sink without pause. 2. By extension, to dump large amounts
    of data at an unprepared target or with no intention of browsing it
    carefully. Usage: considered silly. Rare outside Unix sites. See
    also
                dd
                ,
                BLT
                .

    Among Unix fans, 'cat(1)' is considered an excellent example
    of user-interface design, because it delivers the file contents
    without such verbosity as spacing or headers between the files, and
    because it does not require the files to consist of lines of text,
    but works with any sort of data.

    Among Unix haters, 'cat(1)' is considered the

```
                canonical
                  example of *bad* user-interface design, because of its
   woefully unobvious name.  It is far more often used to
                blast
                 a
   file to standard output than to concatenate two files.  The name
   'cat' for the former operation is just as unintuitive as, say,
   LISP's
                cdr
                .

   Of such oppositions are
                holy wars
                 made....
```

catatonic adj. Describes a condition of suspended animation
   in which something is so
                wedged
                 or
                hung
                 that it makes no
   response. If you are typing on a terminal and suddenly the
   computer doesn't even echo the letters back to the screen as you
   type, let alone do what you're asking it to do, then the computer
   is suffering from catatonia (possibly because it has crashed).
   "There I was in the middle of a winning game of
                nethack
                 and
   it went catatonic on me! Aaargh!" Compare
                buzz
                .

cd tilde /C-D til-d*/ vi. To go home. From the Unix
   C-shell and Korn-shell command 'cd ~', which takes one to
   one's '$HOME' ('cd' with no arguments happens to do the
   same thing). By extension, may be used with other arguments; thus,
   over an electronic chat link, 'cd ~coffee' would mean "I'm
   going to the coffee machine."

cdr /ku'dr/ or /kuh'dr/ vt. [from LISP] To skip past
   the first item from a list of things (generalized from the LISP
   operation on binary tree structures, which returns a list
   consisting of all but the first element of its argument). In the
   form 'cdr down', to trace down a list of elements: "Shall we cdr
   down the agenda?" Usage: silly. See also
                loop through
                .

   Historical note: The instruction format of the IBM 7090 that hosted
   the original LISP implementation featured two 15-bit fields called
   the 'address' and 'decrement' parts. The term 'cdr' was originally
   'Contents of Decrement part of Register'. Similarly, 'car' stood
   for 'Contents of Address part of Register'.

   The cdr and car operations have since become bases for
   formation of compound metaphors in non-LISP contexts. GLS recalls,
   for example, a programming project in which strings were

represented as linked lists; the get-character and skip-character
operations were of course called CHAR and CHDR.

chad /chad/ n.   1. The perforated edge strips on printer
   paper, after they have been separated from the printed portion.
   Also called
                selvage
                 and
                perf
                 . 2. obs. The confetti-like
   paper bits punched out of cards or paper tape; this has also been
   called 'chaff', 'computer confetti', and 'keypunch
   droppings'. This use may now be mainstream; it has been reported
   seen (1993) in directions for a card-based voting machine in
   California.

   Historical note: One correspondent believes 'chad' (sense 2)
   derives from the Chadless keypunch (named for its inventor), which
   cut little u-shaped tabs in the card to make a hole when the tab
   folded back, rather than punching out a circle/rectangle; it was
   clear that if the Chadless keypunch didn't make them, then the
   stuff that other keypunches made had to be 'chad'. There is a
   legend that the word was originally acronymic, standing for
   "Card Hole Aggregate Debris", but this has all the earmarks of
   a bogus folk etymology.

chad box n. A metal box about the size of a lunchbox (or in
   some models a large wastebasket), for collecting the
                chad
                 (sense 2) that accumulated in
                Iron Age
                 card punches. You had
   to open the covers of the card punch periodically and empty the
   chad box. The
                bit bucket
                 was notionally the equivalent device
   in the CPU enclosure, which was typically across the room in
   another great gray-and-blue box.

chain 1. vi. [orig. from BASIC's 'CHAIN' statement]
   To hand off execution to a child or successor without going
   through the
                OS
                 command interpreter that invoked it. The state
   of the parent program is lost and there is no returning to it.
   Though this facility used to be common on memory-limited micros and
   is still widely supported for backward compatibility, the jargon
   usage is semi-obsolescent; in particular, most Unix programmers
   will think of this as an
                exec
                 . Oppose the more modern
   'subshell'. 2. n. A series of linked data areas within an
   operating system or application. 'Chain rattling' is the process
   of repeatedly running through the linked data areas searching for
   one which is of interest to the executing program. The implication
   is that there is a very large number of links on the chain.

channel n. [IRC] The basic unit of discussion on
                IRC
                .
   Once one joins a channel, everything one types is read by others on
   that channel. Channels can either be named with numbers or with
   strings that begin with a '#' sign and can have topic descriptions
   (which are generally irrelevant to the actual subject of
   discussion). Some notable channels are '#initgame',
   '#hottub', and '#report'. At times of international
   crisis, '#report' has hundreds of members, some of whom take
   turns listening to various news services and typing in summaries of
   the news, or in some cases, giving first-hand accounts of the
   action (e.g., Scud missile attacks in Tel Aviv during the Gulf War
   in 1991).

channel hopping n. [IRC, GEnie] To rapidly switch channels
   on
                IRC
                , or a GEnie chat board, just as a social butterfly
   might hop from one group to another at a party. This term may
   derive from the TV watcher's idiom, 'channel surfing'.

channel op /chan'l op/ n. [IRC] Someone who is endowed
   with privileges on a particular
                IRC
                 channel; commonly
   abbreviated 'chanop' or 'CHOP'. These privileges include the
   right to
                kick
                 users, to change various status bits, and to
   make others into CHOPs.

chanop /chan'-op/ n. [IRC] See
                channel op
                .

char /keir/ or /char/; rarely, /kar/ n. Shorthand for
   'character'. Esp. used by C programmers, as 'char' is C's
   typename for character data.

charityware /cha'rit-ee-weir'/ n. Syn.
                careware
                .

chase pointers 1. vi. To go through multiple levels of
   indirection, as in traversing a linked list or graph structure.
   Used esp. by programmers in C, where explicit pointers are a very
   common data type. This is techspeak, but it remains jargon when
   used of human networks. "I'm chasing pointers. Bob said you
   could tell me who to talk to about...." See
                dangling pointer
                   and
                snap
                . 2. [Cambridge] 'pointer chase' or
   'pointer hunt': The process of going through a
                core dump

                         (sense 1), interactively or on a large piece of paper printed ↩
                          with
   hex
                 runes
                 , following dynamic data-structures. Used only in a
   debugging context.

chawmp n. [University of Florida] 16 or 18 bits (half of a
   machine word). This term was used by FORTH hackers during the late
   1970s/early 1980s; it is said to have been archaic then, and may
   now be obsolete. It was coined in revolt against the promiscuous
   use of 'word' for anything between 16 and 32 bits; 'word' has
   an additional special meaning for FORTH hacks that made the
   overloading intolerable. For similar reasons, /gaw'bl/ (spelled
   'gawble' or possibly 'gawbul') was in use as a term for 32 or
   48 bits (presumably a full machine word, but our sources are
   unclear on this). These terms are more easily understood if one
   thinks of them as faithful phonetic spellings of 'chomp' and
   'gobble' pronounced in a Florida or other Southern U.S. dialect.
   For general discussion of similar terms, see
                 nybble
                 .

check n. A hardware-detected error condition, most commonly
   used to refer to actual hardware failures rather than
   software-induced traps. E.g., a 'parity check' is the result of
   a hardware-detected parity error. Recorded here because the word
   often humorously extended to non-technical problems. For example,
   the term 'child check' has been used to refer to the problems
   caused by a small child who is curious to know what happens when
   s/he presses all the cute buttons on a computer's console (of
   course, this particular problem could have been prevented with

                 molly-guard
                 s).

chemist n. [Cambridge] Someone who wastes computer time
   on
                 number-crunching
                  when you'd far rather the machine were
   doing something more productive, such as working out anagrams of
   your name or printing Snoopy calendars or running
                 life
                   patterns. May or may not refer to someone who actually studies
   chemistry.

Chernobyl chicken n. See
                 laser chicken
                 .

Chernobyl packet /cher-noh'b*l pak'*t/ n. A network
   packet that induces a
                 broadcast storm
                  and/or
                 network meltdown
                 ,
   in memory of the April 1986 nuclear accident at

Chernobyl in Ukraine. The typical scenario involves an IP Ethernet
datagram that passes through a gateway with both source and
destination Ether and IP address set as the respective broadcast
addresses for the subnetworks being gated between. Compare

        Christmas tree packet
        .

chicken head n. [Commodore] The Commodore Business
Machines logo, which strongly resembles a poultry part. Rendered
in ASCII as 'C='. With the arguable exception of the Amiga (see

        amoeba
        ), Commodore's machines are notoriously crocky little

        bitty box
        es (see also
        PETSCII
). Thus, this usage may owe
something to Philip K. Dick's novel "Do Androids Dream of
Electric Sheep?" (the basis for the movie "Blade Runner"; the
novel is now sold under that title), in which a 'chickenhead' is
a mutant with below-average intelligence.

chiclet keyboard n. A keyboard with a small, flat
rectangular or lozenge-shaped rubber or plastic keys that look like
pieces of chewing gum. (Chiclets is the brand name of a variety of
chewing gum that does in fact resemble the keys of chiclet
keyboards.) Used esp. to describe the original IBM PCjr
keyboard. Vendors unanimously liked these because they were cheap,
and a lot of early portable and laptop products got launched using
them. Customers rejected the idea with almost equal unanimity, and
chiclets are not often seen on anything larger than a digital watch
any more.

chine nual /sheen'yu-*l/ n.,obs. [MIT] The LISP Machine
Manual, so called because the title was wrapped around the cover so
only those letters showed on the front.

Chinese Army technique n. Syn.
        Mongolian Hordes technique
        .

choad /chohd/ n. Synonym for 'penis' used in
alt.tasteless and popularized by the denizens thereof. They
say: "We think maybe it's from Middle English but we're all too
damned lazy to check the OED." [I'm not. It isn't. -- ESR] This
term is alleged to have been inherited through 1960s underground
comics, and to have been recently sighted in the Beavis and
Butthead cartoons.

choke v. 1. To reject input, often ungracefully. "NULs
make System V's 'lpr(1)' choke." "I tried building an

        EMACS
         binary to use
        X

```
               , but `cpp(1)' choked on all
   those `#define's."  See
               barf
               ,
               gag
               ,
               vi
               .
   2. [MIT] More generally, to fail at any endeavor, but with some
   flair or bravado; the popular definition is "to snatch defeat from
   the jaws of victory."
```

chomp vi. To
```
               lose
               ; specifically, to chew on something
   of which more was bitten off than one can.  Probably related to
   gnashing of teeth.  See
               bagbiter
               .
```

```
   A hand gesture commonly accompanies this.  To perform it, hold the
   four fingers together and place the thumb against their tips.  Now
   open and close your hand rapidly to suggest a biting action (much
   like what Pac-Man does in the classic video game, though this
   pantomime seems to predate that).  The gesture alone means `chomp
   chomp' (see "
               Verb Doubling
               " in the "
               Jargon Construction
               "
   section of the Prependices).  The hand may be
   pointed at the object of complaint, and for real emphasis you can
   use both hands at once.  Doing this to a person is equivalent to
   saying "You chomper!"  If you point the gesture at yourself, it
   is a humble but humorous admission of some failure.  You might do
   this if someone told you that a program you had written had failed
   in some surprising way and you felt dumb for not having anticipated
   it.
```

chomper n. Someone or something that is chomping; a loser.
```
   See
               loser
               ,
               bagbiter
               ,
               chomp
               .
```

CHOP /chop/ n. [IRC] See
```
               channel op
               .
```

Christmas tree n. A kind of RS-232 line tester or breakout
   box featuring rows of blinking red and green LEDs suggestive of
   Christmas lights.

Christmas tree packet n. A packet with every single option

         set for whatever protocol is in use. See
                  kamikaze packet
                  ,

                  Chernobyl packet
                  . (The term doubtless derives from a fanciful
   image of each little option bit being represented by a
   different-colored light bulb, all turned on.)

chrome n. [from automotive slang via wargaming] Showy features
   added to attract users but contributing little or nothing to
   the power of a system. "The 3D icons in Motif are just chrome,
   but they certainly are *pretty* chrome!" Distinguished from

                  bells and whistles
                   by the fact that the latter are usually
   added to gratify developers' own desires for featurefulness.
   Often used as a term of contempt.

chug vi. To run slowly; to
                  grind
                   or
                  grovel
                  .
   "The disk is chugging like crazy."

Church of the SubGenius n. A mutant offshoot of

                  Discordianism
                   launched in 1981 as a spoof of fundamentalist
   Christianity by the 'Reverend' Ivan Stang, a brilliant satirist
   with a gift for promotion. Popular among hackers as a rich source
   of bizarre imagery and references such as "Bob" the divine
   drilling-equipment salesman, the Benevolent Space Xists, and the
   Stark Fist of Removal. Much SubGenius theory is concerned with the
   acquisition of the mystical substance or quality of
                  slack
                  .

Cinderella Book [CMU] n. "Introduction to Automata
   Theory, Languages, and Computation", by John Hopcroft and Jeffrey
   Ullman, (Addison-Wesley, 1979). So called because the cover
   depicts a girl (putatively Cinderella) sitting in front of a Rube
   Goldberg device and holding a rope coming out of it. On the back
   cover, the device is in shambles after she has (inevitably) pulled
   on the rope. See also
                  book titles
                  .

CI$ // n. Hackerism for 'CIS', CompuServe Information
   Service. The dollar sign refers to CompuServe's rather steep line
   charges. Often used in
                  sig block
                  s just before a CompuServe
   address. Syn.
                  Compu$erve
                  .

Classic C /klas'ik C/ [a play on 'Coke Classic'] n. The
   C programming language as defined in the first edition of
               K&R
               ,
   with some small additions. It is also known as 'K&R C'. The name
   came into use while C was being standardized by the ANSI X3J11
   committee. Also 'C Classic'.

   An analogous construction is sometimes applied elsewhere: thus,
   'X Classic', where X = Star Trek (referring to the original TV
   series) or X = PC (referring to IBM's ISA-bus machines as opposed
   to the PS/2 series). This construction is especially used of
   product series in which the newer versions are considered serious
   losers relative to the older ones.

clean 1. adj. Used of hardware or software designs, implies
   'elegance in the small', that is, a design or implementation that
   may not hold any surprises but does things in a way that is
   reasonably intuitive and relatively easy to comprehend from the
   outside. The antonym is 'grungy' or
               crufty
               . 2. v. To
   remove unneeded or undesired files in a effort to reduce clutter:
   "I'm cleaning up my account." "I cleaned up the garbage and now
   have 100 Meg free on that partition."

CLM /C-L-M/ [Sun: 'Career Limiting Move'] 1. n. An action
   endangering one's future prospects of getting plum projects and
   raises, and possibly one's job: "His Halloween costume was a
   parody of his manager. He won the prize for 'best CLM'." 2. adj.
   Denotes extreme severity of a bug, discovered by a customer and
   obviously missed earlier because of poor testing: "That's a CLM
   bug!"

clobber vt. To overwrite, usually unintentionally: "I
   walked off the end of the array and clobbered the stack." Compare

               mung
               ,
               scribble
               ,
               trash
               , and
               smash the stack
               .

clocks n. Processor logic cycles, so called because each
   generally corresponds to one clock pulse in the processor's timing.
   The relative execution times of instructions on a machine are
   usually discussed in clocks rather than absolute fractions of a
   second; one good reason for this is that clock speeds for various
   models of the machine may increase as technology improves, and it
   is usually the relative times one is interested in when discussing
   the instruction set. Compare
               cycle
               .

clone n. 1. An exact duplicate: "Our product is a clone of
   their product." Implies a legal reimplementation from
   documentation or by reverse-engineering. Also connotes lower
   price. 2. A shoddy, spurious copy: "Their product is a clone of
   our product." 3. A blatant ripoff, most likely violating
   copyright, patent, or trade secret protections: "Your product is a
   clone of my product." This use implies legal action is pending.
   4. 'PC clone:' a PC-BUS/ISA or EISA-compatible 80x86-based
   microcomputer (this use is sometimes spelled 'klone' or
   'PClone'). These invariably have much more bang for the buck
   than the IBM archetypes they resemble. 5. In the construction
   'Unix clone': An OS designed to deliver a Unix-lookalike
   environment without Unix license fees, or with additional
   'mission-critical' features such as support for real-time
   programming. 6. v. To make an exact copy of something. "Let me
   clone that" might mean "I want to borrow that paper so I can make
   a photocopy" or "Let me get a copy of that file before you

                mung
                 it".

clone-and-hack coding n. [DEC] Syn.
                case and paste
                .

clover key n. [Mac users] See
                feature key
                .

clustergeeking /kluh'st*r-gee'king/ n. [CMU] Spending
   more time at a computer cluster doing CS homework than most people
   spend breathing.

COBOL /koh'bol/ n. [COmmon Business-Oriented Language]
   (Synonymous with
                evil
                .) A weak, verbose, and flabby language
   used by
                card walloper
                s to do boring mindless things on

                dinosaur
                 mainframes. Hackers believe that all COBOL
   programmers are
                suit
                s or
                code grinder
                s, and no
   self-respecting hacker will ever admit to having learned the
   language. Its very name is seldom uttered without ritual
   expressions of disgust or horror. One popular one is Edsger
   Dijkstra's famous observation that "The use of COBOL cripples the
   mind; its teaching should, therefore, be regarded as a criminal
   offense." (from "Selected Writings on Computing: A Personal
   Perspective") See also
                fear and loathing

```
                            ,
                            software rot
                            .
```

COBOL fingers /koh'bol fing'grz/ n. Reported from Sweden,
    a (hypothetical) disease one might get from coding in COBOL. The
    language requires code verbose beyond all reason (see

                            candygrammar
                            ); thus it is alleged that programming too much in
    COBOL causes one's fingers to wear down to stubs by the endless
    typing. "I refuse to type in all that source code again; it would
    give me COBOL fingers!"

code grinder n. 1. A
                            suit
                            -wearing minion of the sort
    hired in legion strength by banks and insurance companies to
    implement payroll packages in RPG and other such unspeakable
    horrors. In its native habitat, the code grinder often removes the
    suit jacket to reveal an underplumage consisting of button-down
    shirt (starch optional) and a tie. In times of dire stress, the
    sleeves (if long) may be rolled up and the tie loosened about half
    an inch. It seldom helps. The
                            code grinder
                            's milieu is about
    as far from hackerdom as one can get and still touch a computer;
    the term connotes pity. See
                            Real World
                            ,
                            suit
                            . 2. Used
    of or to a hacker, a really serious slur on the person's creative
    ability; connotes a design style characterized by primitive
    technique, rule-boundedness,
                            brute force
                            , and utter lack of
    imagination. Compare
                            card walloper
                            ; contrast
                            hacker
                            ,

                            Real Programmer
                            .

Code of the Geeks n. see
                            geek code
                            .

code police n. [by analogy with George Orwell's 'thought
    police'] A mythical team of Gestapo-like storm troopers that might
    burst into one's office and arrest one for violating programming
    style rules. May be used either seriously, to underline a claim
    that a particular style violation is dangerous, or ironically, to
    suggest that the practice under discussion is condemned mainly by
    anal-retentive

                    weenie
                    s. "Dike out that goto or the code
   police will get you!" The ironic usage is perhaps more common.

codes n. [scientific computing] Programs. This usage is common
   in people who hack supercomputers and heavy-duty

                    number-crunching
                    , rare to unknown elsewhere (if you say
   "codes" to hackers outside scientific computing, their
   first association is likely to be "and cyphers").

codewalker n. A program component that traverses other
   programs for a living. Compilers have codewalkers in their front
   ends; so do cross-reference generators and some database front
   ends. Other utility programs that try to do too much with source
   code may turn into codewalkers. As in "This new 'vgrind'
   feature would require a codewalker to implement."

coefficient of X n. Hackish speech makes heavy use of
   pseudo-mathematical metaphors. Four particularly important
   ones involve the terms 'coefficient', 'factor', 'index', and
   'quotient'. They are often loosely applied to things you cannot
   really be quantitative about, but there are subtle distinctions
   among them that convey information about the way the speaker
   mentally models whatever he or she is describing.

   'Foo factor' and 'foo quotient' tend to describe something for
   which the issue is one of presence or absence. The canonical
   example is
                    fudge factor
                    . It's not important how much you're
   fudging; the term simply acknowledges that some fudging is needed.
   You might talk of liking a movie for its silliness factor.
   Quotient tends to imply that the property is a ratio of two
   opposing factors: "I would have won except for my luck quotient."
   This could also be "I would have won except for the luck factor",
   but using *quotient* emphasizes that it was bad luck
   overpowering good luck (or someone else's good luck overpowering
   your own).

   'Foo index' and 'coefficient of foo' both tend to imply
   that foo is, if not strictly measurable, at least something that
   can be larger or smaller. Thus, you might refer to a paper or
   person as having a 'high bogosity index', whereas you would be less
   likely to speak of a 'high bogosity factor'. 'Foo index' suggests
   that foo is a condensation of many quantities, as in the mundane
   cost-of-living index; 'coefficient of foo' suggests that foo is a
   fundamental quantity, as in a coefficient of friction. The choice
   between these terms is often one of personal preference; e.g., some
   people might feel that bogosity is a fundamental attribute and thus
   say 'coefficient of bogosity', whereas others might feel it is a
   combination of factors and thus say 'bogosity index'.

cokebottle /kohk'bot-l/ n. Any very unusual character,
   particularly one you can't type because it it isn't on your
   keyboard. MIT people used to complain about the

'control-meta-cokebottle' commands at SAIL, and SAIL people
complained right back about the '
                altmode
                -altmode-cokebottle'
commands at MIT. After the demise of the
                space-cadet keyboard
                ,
'cokebottle' faded away as serious usage, but was
often invoked humorously to describe an (unspecified) weird or
non-intuitive keystroke command. It may be due for a second
inning, however. The OSF/Motif window manager, 'mwm(1)', has
a reserved keystroke for switching to the default set of
keybindings and behavior. This keystroke is (believe it or not)
'control-meta-bang' (see
                bang
). Since the exclamation point
looks a lot like an upside down Coke bottle, Motif hackers have
begun referring to this keystroke as 'cokebottle'. See also

                quadruple bucky
                .

cold boot n. See
                boot
                .

COME FROM n. A semi-mythical language construct dual to the
'go to'; 'COME FROM' <label> would cause the referenced label
to act as a sort of trapdoor, so that if the program ever reached
it control would quietly and
                automagically
                 be transferred to
the statement following the 'COME FROM'. 'COME FROM'
was first proposed in R. Lawrence Clark's "A Linguistic
Contribution to GOTO-less programming", which appeared in a 1973

                Datamation
                 issue (and was reprinted in the April 1984 issue of
"Communications of the ACM"). This parodied the then-raging
'structured programming'
                holy wars
                 (see
                considered harmful
).
Mythically, some variants are the 'assigned COME
FROM' and the 'computed COME FROM' (parodying some nasty control
constructs in FORTRAN and some extended BASICs). Of course,
multi-tasking (or non-determinism) could be implemented by having
more than one 'COME FROM' statement coming from the same
label.

In some ways the FORTRAN 'DO' looks like a 'COME FROM'
statement. After the terminating statement number/'CONTINUE'
is reached, control continues at the statement following the DO.
Some generous FORTRANs would allow arbitrary statements (other than
'CONTINUE') for the statement, leading to examples like:

```
      DO 10 I=1,LIMIT
 C imagine many lines of code here, leaving the
 C original DO statement lost in the spaghetti...
      WRITE(6,10) I,FROB(I)
 10   FORMAT(1X,I5,G10.4)
```

in which the trapdoor is just after the statement labeled 10.
(This is particularly surprising because the label doesn't appear
to have anything to do with the flow of control at all!)

While sufficiently astonishing to the unsuspecting reader, this
form of 'COME FROM' statement isn't completely general. After
all, control will eventually pass to the following statement. The
implementation of the general form was left to Univac FORTRAN,
ca. 1975 (though a roughly similar feature existed on the IBM 7040
ten years earlier). The statement 'AT 100' would perform a
'COME FROM 100'. It was intended strictly as a debugging aid,
with dire consequences promised to anyone so deranged as to use it
in production code. More horrible things had already been
perpetrated in production languages, however; doubters need only
contemplate the 'ALTER' verb in

          COBOL

          .

'COME FROM' was supported under its own name for the first
time 15 years later, in C-INTERCAL (see

          INTERCAL

          ,

          retrocomputing
          ); knowledgeable observers are still reeling
from the shock.

comm mode /kom mohd/ n. [ITS: from the feature supporting
   on-line chat; the term may spelled with one or two m's] Syn. for

          talk mode

          .

command key n. [Mac users] Syn.
          feature key

          .

comment out vt. To surround a section of code with comment
   delimiters or to prefix every line in the section with a comment
   marker; this prevents it from being compiled or interpreted. Often
   done when the code is redundant or obsolete, but is being left in
   the source to make the intent of the active code clearer; also when
   the code in that section is broken and you want to bypass it in
   order to debug some other part of the code. Compare
          condition out

          ,
   usually the preferred technique in languages (such as
          C
)
   that make it possible.

Commonwealth Hackish n. Hacker jargon as spoken outside
   the U.S., esp. in the British Commonwealth. It is reported that
   Commonwealth speakers are more likely to pronounce truncations like
   'char' and 'soc', etc., as spelled (/char/, /sok/), as
   opposed to American /keir/ and /sohsh/. Dots in
                newsgroup
                  names (especially two-component names) tend to be pronounced ←
                    more
   often (so soc.wibble is /sok dot wib'l/ rather than /sohsh
   wib'l/). The prefix
                meta
                 may be pronounced /mee't*/;
   similarly, Greek letter beta is usually /bee't*/, zeta is usually
   /zee't*/, and so forth. Preferred
                metasyntactic variable
                s
   include
                blurgle
                , 'eek', 'ook', 'frodo', and
   'bilbo';
                wibble
                , 'wobble', and in emergencies
   'wubble'; 'flob', 'banana', 'tom', 'dick',
   'harry', 'wombat', 'frog',
                fish
                , and so on and
   on (see
                foo
                , sense 4).

   Alternatives to verb doubling include suffixes '-o-rama',
   'frenzy' (as in feeding frenzy), and 'city' (examples: "barf
   city!" "hack-o-rama!" "core dump frenzy!"). Finally, note
   that the American terms 'parens', 'brackets', and 'braces' for (),
   [], and {} are uncommon; Commonwealth hackish prefers
   'brackets', 'square brackets', and 'curly brackets'. Also, the
   use of 'pling' for
                bang
                 is common outside the United States.

   See also
                attoparsec
                ,
                calculator
                ,
                chemist
                ,

                console jockey
                ,
                fish
                ,
                go-faster stripes
                ,

                grunge
                ,

hakspek
,
heavy metal
,
leaky heap
,

lord high fixer
,
loose bytes
,
muddie
,
nadger
,

noddy
,
psychedelicware
,
plingnet
,
raster blaster
,

RTBM
,
seggie
,
spod
,
sun lounge
,

terminal junkie
,
tick-list features
,
weeble
,

weasel
,
YABA
, and notes or definitions under
Bad Thing
,

barf
,
bogus
,
bum
,
chase pointers
,

cosmic rays

,

crippleware

,

crunch

,

dodgy

,

gonk

,

hamster

,

hardwarily

,

mess-dos

,

nybble

,

proglet

,

root

,

SEX

,

tweak

, and

xyzzy

.

compact adj. Of a design, describes the valuable property
   that it can all be apprehended at once in one's head. This
   generally means the thing created from the design can be used with
   greater facility and fewer errors than an equivalent tool that is
   not compact. Compactness does not imply triviality or lack of
   power; for example, C is compact and FORTRAN is not, but C is more
   powerful than FORTRAN. Designs become non-compact through
   accreting
                feature
                s and
                cruft
                 that don't merge cleanly
   into the overall design scheme (thus, some fans of
                Classic C
                   maintain that ANSI C is no longer compact).

compiler jock n. See
                jock
                 (sense 2).

compress [Unix] vt. When used without a qualifier,
   generally refers to
                crunch
                ing of a file using a particular C
   implementation of compression by James A. Woods et al. and widely

    circulated via
                Usenet
                ; use of
                crunch
                 itself in this sense
    is rare among Unix hackers. Specifically, compress is built around
    the Lempel-Ziv-Welch algorithm as described in "A Technique for
    High Performance Data Compression", Terry A. Welch, "IEEE
    Computer", vol. 17, no. 6 (June 1984), pp. 8--19.

Compu$erve n. See
                CI$
                . Synonyms CompuSpend and
    Compu$pend are also reported.

computer confetti n. Syn.
                chad
                . Though this term is
    common, this use of punched-card chad is not a good idea, as the
    pieces are stiff and have sharp corners that could injure the eyes.
    GLS reports that he once attended a wedding at MIT during which he
    and a few other guests enthusiastically threw chad instead of
    rice. The groom later grumbled that he and his bride had spent most
    of the evening trying to get the stuff out of their hair.

computer geek n. 1. One who eats (computer) bugs for a
    living. One who fulfills all the dreariest negative stereotypes
    about hackers: an asocial, malodorous, pasty-faced monomaniac with
    all the personality of a cheese grater. Cannot be used by
    outsiders without implied insult to all hackers; compare
    black-on-black usage of 'nigger'. A computer geek may be either
    a fundamentally clueless individual or a proto-hacker in

                larval stage
                . Also called 'turbo nerd', 'turbo geek'. See also

                propeller head
                ,
                clustergeeking
                ,
                geek out
                ,

                wannabee
                ,
                terminal junkie
                ,
                spod
                ,
                weenie
                .
    2. Some self-described computer geeks use this term in a positive
    sense and protest sense 1 (this seems to be a post-1990
    development).

computron /kom'pyoo-tron'/ n. 1. A notional unit of
    computing power combining instruction speed and storage capacity,

dimensioned roughly in instructions-per-second times
megabytes-of-main-store times megabytes-of-mass-storage. "That
machine can't run GNU Emacs, it doesn't have enough computrons!"
This usage is usually found in metaphors that treat computing power
as a fungible commodity good, like a crop yield or diesel
horsepower. See

        bitty box

        ,

        Get a real computer!

        ,

        toy

        ,

        crank

        . 2. A mythical subatomic particle that bears
the unit quantity of computation or information, in much the same
way that an electron bears one unit of electric charge (see also

        bogon

). An elaborate pseudo-scientific theory of computrons
has been developed based on the physical fact that the molecules in
a solid object move more rapidly as it is heated. It is argued
that an object melts because the molecules have lost their
information about where they are supposed to be (that is, they have
emitted computrons). This explains why computers get so hot and
require air conditioning; they use up computrons. Conversely, it
should be possible to cool down an object by placing it in the path
of a computron beam. It is believed that this may also explain why
machines that work at the factory fail in the computer room: the
computrons there have been all used up by the other hardware.
(This theory probably owes something to the "Warlock" stories
by Larry Niven, the best known being "What Good is a Glass
Dagger?", in which magic is fueled by an exhaustible natural
resource called 'mana'.)

con [from SF fandom] n. A science-fiction convention. Not
used of other sorts of conventions, such as professional meetings.
This term, unlike many others of SF-fan slang, is widely recognized
even by hackers who aren't

        fan

        s. "We'd been corresponding on
the net for months, then we met face-to-face at a con."

condition out vt. To prevent a section of code from being
compiled by surrounding it with a conditional-compilation directive
whose condition is always false. The

        canonical

         examples of
these directives are '#if 0' (or '#ifdef notdef', though
some find the latter

        bletcherous

) and '#endif' in C.
Compare

        comment out

        .

condom n. 1. The protective plastic bag that accompanies

3.5-inch microfloppy diskettes. Rarely, also used of (paper) disk
envelopes. Unlike the write protect tab, the condom (when left on)
not only impedes the practice of

                SEX

                 but has also been shown
to have a high failure rate as drive mechanisms attempt to access
the disk -- and can even fatally frustrate insertion. 2. The
protective cladding on a

                light pipe

                . 3. 'keyboard condom':
A flexible, transparent plastic cover for a keyboard, designed to
provide some protection against dust and

                programming fluid

                 without impeding typing. 4. 'elephant condom': the plastic
shipping bags used inside cardboard boxes to protect hardware in
transit. 5. n.,obs. A dummy directory '/usr/tmp/sh', created
to foil the Great Worm by exploiting a portability bug in one
of its parts. So named in the title of a comp.risks article by
Gene Spafford during the Worm crisis, and again in the text of
"The Internet Worm Program: An Analysis", Purdue Technical
Report CSD-TR-823. See

                Great Worm, the

                .

confuser n. Common soundalike slang for 'computer'.
   Usually encountered in compounds such as 'confuser room',
   'personal confuser', 'confuser guru'. Usage: silly.

connector conspiracy n. [probably came into prominence with
   the appearance of the KL-10 (one model of the

                PDP-10

                ), none of
   whose connectors matched anything else] The tendency of
   manufacturers (or, by extension, programmers or purveyors of
   anything) to come up with new products that don't fit together with
   the old stuff, thereby making you buy either all new stuff or
   expensive interface devices. The KL-10 Massbus connector was
   actually *patented* by

                DEC

                , which reputedly refused to
   license the design and thus effectively locked third parties out of
   competition for the lucrative Massbus peripherals market. This
   policy is a source of never-ending frustration for the diehards who
   maintain older PDP-10 or VAX systems. Their CPUs work fine, but
   they are stuck with dying, obsolescent disk and tape drives with
   low capacity and high power requirements.

   (A closely related phenomenon, with a slightly different intent, is
   the habit manufacturers have of inventing new screw heads so that
   only Designated Persons, possessing the magic screwdrivers, can
   remove covers and make repairs or install options. A good 1990s
   example is the invention of Torx screws for cable-TV set-top boxes.
   Older Apple Macintoshes took this one step further, requiring not
   only a hex wrench but a specialized case-cracking tool to open the
   box.)

   In these latter days of open-systems computing this term has fallen

somewhat into disuse, to be replaced by the observation that
"Standards are great! There are so *many* of them to choose
from!" Compare
                backward combatability
                .

cons /konz/ or /kons/ [from LISP] 1. vt. To add a new
   element to a specified list, esp. at the top. "OK, cons picking
   a replacement for the console TTY onto the agenda." 2. 'cons
   up': vt. To synthesize from smaller pieces: "to cons up an
   example".

   In LISP itself, 'cons' is the most fundamental operation for
   building structures. It takes any two objects and returns a
   'dot-pair' or two-branched tree with one object hanging from each
   branch. Because the result of a cons is an object, it can be used
   to build binary trees of any shape and complexity. Hackers think
   of it as a sort of universal constructor, and that is where the
   jargon meanings spring from.

considered harmful adj. Edsger W. Dijkstra's note in the
   March 1968 "Communications of the ACM", "Goto Statement
   Considered Harmful", fired the first salvo in the structured
   programming wars. Amusingly, the ACM considered the resulting
   acrimony sufficiently harmful that it will (by policy) no longer
   print an article taking so assertive a position against a coding
   practice. In the ensuing decades, a large number of both serious
   papers and parodies have borne titles of the form "X
   considered Y". The structured-programming wars eventually blew
   over with the realization that both sides were wrong, but use of
   such titles has remained as a persistent minor in-joke (the
   'considered silly' found at various places in this lexicon is
   related).

console n. 1. The operator's station of a
                mainframe
                .
   In times past, this was a privileged location that conveyed godlike
   powers to anyone with fingers on its keys. Under Unix and other
   modern timesharing OSes, such privileges are guarded by passwords
   instead, and the console is just the
                tty
                 the system was booted
   from. Some of the mystique remains, however, and it is traditional
   for sysadmins to post urgent messages to all users from the console
   (on Unix, /dev/console). 2. On microcomputer Unix boxes, the main
   screen and keyboard (as opposed to character-only terminals talking
   to a serial port). Typically only the console can do real graphics
   or run
                X
                . See also
                CTY
                .

console jockey n. See
                terminal junkie
                .

content-free adj. [by analogy with techspeak
   'context-free'] Used of a message that adds nothing to the
   recipient's knowledge. Though this adjective is sometimes applied
   to
                flamage
                , it more usually connotes derision for
   communication styles that exalt form over substance or are centered
   on concerns irrelevant to the subject ostensibly at hand. Perhaps
   most used with reference to speeches by company presidents and
   other professional manipulators. "Content-free? Uh... that's
   anything printed on glossy paper." (See also
                four-color glossies
                .)
   "He gave a talk on the implications of electronic
   networks for postmodernism and the fin-de-siecle aesthetic. It was
   content-free."

control-C vi. 1. "Stop whatever you are doing." From the
   interrupt character used on many operating systems to abort a
   running program. Considered silly. 2. interj. Among BSD Unix
   hackers, the canonical humorous response to "Give me a break!"

control-O vi. "Stop talking." From the character used on
   some operating systems to abort output but allow the program to
   keep on running. Generally means that you are not interested in
   hearing anything more from that person, at least on that topic; a
   standard response to someone who is flaming. Considered silly.
   Compare
                control-S
                .

control-Q vi. "Resume." From the ASCII DC1 or
                XON
                 character (the pronunciation /X-on/ is therefore also used), ↩
                    used
   to undo a previous
                control-S
                .

control-S vi. "Stop talking for a second." From the
   ASCII DC3 or XOFF character (the pronunciation /X-of/ is
   therefore also used). Control-S differs from
                control-O
                 in
   that the person is asked to stop talking (perhaps because you are
   on the phone) but will be allowed to continue when you're ready to
   listen to him -- as opposed to control-O, which has more of the
   meaning of "Shut up." Considered silly.

Conway's Law prov. The rule that the organization of the
   software and the organization of the software team will be
   congruent; originally stated as "If you have four groups working
   on a compiler, you'll get a 4-pass compiler".

   The law was named after Melvin Conway, an early proto-hacker who
   wrote an assembler for the Burroughs 220 called SAVE. (The name

'SAVE' didn't stand for anything; it was just that you lost fewer
card decks and listings because they all had SAVE written on them.)

cookbook n.   [from amateur electronics and radio] A book of small
code segments that the reader can use to do various
                magic
                 things in programs. One current example is the
    "
                PostScript
                 Language Tutorial and Cookbook" by Adobe
Systems, Inc (Addison-Wesley, ISBN 0-201-10179-3), also known as
the
                Blue Book
                 which has recipes for things like wrapping text
around arbitrary curves and making 3D fonts. Cookbooks, slavishly
followed, can lead one into
                voodoo programming
                , but are useful
for hackers trying to
                monkey up
                 small programs in unknown
languages. This function is analogous to the role of phrasebooks
in human languages.

cooked mode n.   [Unix, by opposition from
                raw mode
                ] The
normal character-input mode, with interrupts enabled and with
erase, kill and other special-character interpretations performed
directly by the tty driver. Oppose
                raw mode
                ,
                rare mode
                .
This term is techspeak under Unix but jargon elsewhere; other
operating systems often have similar mode distinctions, and the
raw/rare/cooked way of describing them has spread widely along with
the C language and other Unix exports. Most generally, 'cooked
mode' may refer to any mode of a system that does extensive
preprocessing before presenting data to a program.

cookie n. A handle, transaction ID, or other token of
agreement between cooperating programs. "I give him a packet, he
gives me back a cookie." The claim check you get from a
dry-cleaning shop is a perfect mundane example of a cookie; the
only thing it's useful for is to relate a later transaction to this
one (so you get the same clothes back). Compare
                magic cookie
                ;
see also
                fortune cookie
                .

cookie bear n.,obs. Original term, pre-Sesame-Street, for
what is now universally called a
                cookie monster
                . A

correspondent observes "In those days, hackers were actually
getting their yucks from...sit down now...Andy Williams.
Yes, *that* Andy Williams. Seems he had a rather hip (by the
standards of the day) TV variety show. One of the best parts of the
show was the recurring 'cookie bear' sketch. In these sketches, a
guy in a bear suit tried all sorts of tricks to get a cookie out of
Williams. The sketches would always end with Williams shrieking
(and I don't mean figuratively), 'No cookies! Not now, not
ever...NEVER!!!' And the bear would fall down. Great stuff.

cookie file n. A collection of
                fortune cookie
                s in a
   format that facilitates retrieval by a fortune program. There are
   several different cookie files in public distribution, and site
   admins often assemble their own from various sources including this
   lexicon.

cookie jar n. An area of memory set aside for storing

                cookie
                s. Most commonly heard in the Atari ST community; many
   useful ST programs record their presence by storing a distinctive

                magic number
                 in the jar. Programs can inquire after the
   presence or otherwise of other programs by searching the contents
   of the jar.

cookie monster n. [from the children's TV program
   "Sesame Street"] Any of a family of early (1970s) hacks
   reported on
                TOPS-10
                ,
                ITS
                ,
                Multics
                , and elsewhere
   that would lock up either the victim's terminal (on a time-sharing
   machine) or the
                console
                 (on a batch
                mainframe
                ),
   repeatedly demanding "I WANT A COOKIE". The required responses
   ranged in complexity from "COOKIE" through "HAVE A COOKIE" and
   upward. Folklorist Jan Brunvand (see
                FOAF
) has described
   these programs as urban legends (implying they probably never
   existed) but they existed, all right, in several different
   versions. See also
                wabbit
                . Interestingly, the term 'cookie
   monster' appears to be a
                retcon
                ; the original term was

cookie bear
.

copious free time n. [Apple; orig. fr. the intro to Tom
   Lehrer's song "It Makes A Fellow Proud To Be A Soldier"]
   1. [used ironically to indicate the speaker's lack of the quantity
   in question] A mythical schedule slot for accomplishing tasks held
   to be unlikely or impossible. Sometimes used to indicate that the
   speaker is interested in accomplishing the task, but believes that
   the opportunity will not arise. "I'll implement the automatic
   layout stuff in my copious free time." 2. [Archly] Time reserved
   for bogus or otherwise idiotic tasks, such as implementation of

chrome
            , or the stroking of
            suit
            s. "I'll get back to him
   on that feature in my copious free time."

copper n. Conventional electron-carrying network cable with
   a core conductor of copper -- or aluminum! Opposed to

light pipe
             or, say, a short-range microwave link.

copy protection n. A class of methods for preventing
   incompetent pirates from stealing software and legitimate customers
   from using it. Considered silly.

copybroke /kop'ee-brohk/ adj. 1. [play on 'copyright']
   Used to describe an instance of a copy-protected program that has
   been 'broken'; that is, a copy with the copy-protection scheme
   disabled. Syn.
            copywronged
            . 2. Copy-protected software
   which is unusable because of some bit-rot or bug that has confused
   the anti-piracy check. See also
            copy protection
            .

copyleft /kop'ee-left/ n. [play on 'copyright'] 1. The
   copyright notice ('General Public License') carried by
            GNU

            EMACS
             and other Free Software Foundation software, granting reuse
   and reproduction rights to all comers (but see also

            General Public Virus
). 2. By extension, any copyright notice
   intended to achieve similar aims.

copywronged /kop'ee-rongd/ adj. [play on 'copyright']
   Syn. for
            copybroke
            .

core n. Main storage or RAM. Dates from the days of
   ferrite-core memory; now archaic as techspeak most places outside
   IBM, but also still used in the Unix community and by old-time
   hackers or those who would sound like them. Some derived idioms
   are quite current; 'in core', for example, means 'in memory'
   (as opposed to 'on disk'), and both
                core dump
                 and the 'core
   image' or 'core file' produced by one are terms in favor. Some
   varieties of Commonwealth hackish prefer
                store
                .

core cancer n. A process that exhibits a slow but
   inexorable resource
                leak
                 -- like a cancer, it kills by
   crowding out productive 'tissue'.

core dump n. [common
                Iron Age
                 jargon, preserved by
   Unix] 1. [techspeak] A copy of the contents of
                core
                , produced
   when a process is aborted by certain kinds of internal error.
   2. By extension, used for humans passing out, vomiting, or
   registering extreme shock. "He dumped core. All over the floor.
   What a mess." "He heard about X and dumped core."
   3. Occasionally used for a human rambling on pointlessly at great
   length; esp. in apology: "Sorry, I dumped core on you". 4. A
   recapitulation of knowledge (compare
                bits
                , sense 1). Hence,
   spewing all one knows about a topic (syn.
                brain dump
                ), esp.
   in a lecture or answer to an exam question. "Short, concise
   answers are better than core dumps" (from the instructions to an
   exam at Columbia). See
                core
                .

core leak n. Syn.
                memory leak
                .

Core Wars n. A game between 'assembler' programs in a
   simulated machine, where the objective is to kill your opponent's
   program by overwriting it. Popularized by A. K. Dewdney's column
   in "Scientific American" magazine, this was actually devised
   by Victor Vyssotsky, Robert Morris Sr., and Dennis Ritchie in the
   early 1960s (their original game was called 'Darwin' and ran on a
   PDP-1 at Bell Labs). See
                core
                .

corge /korj/ n.   [originally, the name of a cat] Yet
    another
                  metasyntactic variable
                  , invented by Mike Gallaher and
    propagated by the
                  GOSMACS
                   documentation. See
                  grault
                  .

cosmic rays n.   Notionally, the cause of
                  bit rot
                  .
    However, this is a semi-independent usage that may be invoked as a
    humorous way to
                  handwave
                   away any minor
                  randomness
                   that
    doesn't seem worth the bother of investigating. "Hey, Eric -- I
    just got a burst of garbage on my
                  tube
                  , where did that come
    from?" "Cosmic rays, I guess." Compare
                  sunspots
                  ,

                  phase of the moon
                  . The British seem to prefer the usage
    'cosmic showers'; 'alpha particles' is also heard, because
    stray alpha particles passing through a memory chip can cause
    single-bit errors (this becomes increasingly more likely as memory
    sizes and densities increase).

    Factual note: Alpha particles cause bit rot, cosmic rays do not
    (except occasionally in spaceborne computers). Intel could not
    explain random bit drops in their early chips, and one hypothesis
    was cosmic rays. So they created the World's Largest Lead Safe,
    using 25 tons of the stuff, and used two identical boards for
    testing. One was placed in the safe, one outside. The hypothesis
    was that if cosmic rays were causing the bit drops, they should see
    a statistically significant difference between the error rates on
    the two boards. They did not observe such a difference. Further
    investigation demonstrated conclusively that the bit drops were due
    to alpha particle emissions from thorium (and to a much lesser
    degree uranium) in the encapsulation material. Since it is
    impossible to eliminate these radioactives (they are uniformly
    distributed through the earth's crust, with the statistically
    insignificant exception of uranium lodes) it became obvious that
    one has to design memories to withstand these hits.

cough and die v. Syn.
                  barf
                  . Connotes that the program
    is throwing its hands up by design rather than because of a bug or
    oversight. "The parser saw a control-A in its input where it was

    looking for a printable, so it coughed and died." Compare

                die
                ,
                die horribly
                ,
                scream and die
                .

cowboy n. [Sun, from William Gibson's
                cyberpunk
                 SF]
    Synonym for
                hacker
                . It is reported that at Sun this word is
    often said with reverence.

CP/M /C-P-M/ n. [Control Program/Monitor; later

                retcon
                ned to Control Program for Microcomputers] An early
    microcomputer
                OS
                 written by hacker Gary Kildall for 8080- and
    Z80-based machines, very popular in the late 1970s but virtually
    wiped out by MS-DOS after the release of the IBM PC in 1981.
    Legend has it that Kildall's company blew its chance to write the
    OS for the IBM PC because Kildall decided to spend a day IBM's reps
    wanted to meet with him enjoying the perfect flying weather in his
    private plane. Many of CP/M's features and conventions strongly
    resemble those of early
                DEC
                 operating systems such as

                TOPS-10
                , OS/8, RSTS, and RSX-11. See
                MS-DOS
                ,

                operating system
                .

CPU Wars /C-P-U worz/ n. A 1979 large-format comic by
    Chas Andres chronicling the attempts of the brainwashed androids of
    IPM (Impossible to Program Machines) to conquer and destroy the
    peaceful denizens of HEC (Human Engineered Computers). This rather
    transparent allegory featured many references to
                ADVENT
                 and
    the immortal line "Eat flaming death, minicomputer mongrels!"
    (uttered, of course, by an IPM stormtrooper). It is alleged that
    the author subsequently received a letter of appreciation on IBM
    company stationery from the head of IBM's Thomas J. Watson Research
    Laboratories (then, as now, one of the few islands of true
    hackerdom in the IBM archipelago). The lower loop of the B in the
    IBM logo, it is said, had been carefully whited out. See

```
                        eat flaming death
                        .
```

crack root v. To defeat the security system of a Unix
   machine and gain
                   root
                    privileges thereby; see
                   cracking
                   .

cracker n. One who breaks security on a system. Coined
   ca. 1985 by hackers in defense against journalistic misuse of

                   hacker
                    (q.v., sense 8). An earlier attempt to establish
   'worm' in this sense around 1981--82 on Usenet was largely a
   failure.

   Use of both these neologisms reflects a strong revulsion against
   the theft and vandalism perpetrated by cracking rings. While it is
   expected that any real hacker will have done some playful cracking
   and knows many of the basic techniques, anyone past
                   larval stage
                    is expected to have outgrown the desire to do so except for
   immediate, benign, practical reasons (for example, if it's
   necessary to get around some security in order to get some work
   done).

   Thus, there is far less overlap between hackerdom and crackerdom
   than the
                   mundane
                    reader misled by sensationalistic journalism
   might expect. Crackers tend to gather in small, tight-knit, very
   secretive groups that have little overlap with the huge, open
   poly-culture this lexicon describes; though crackers often like to
   describe *themselves* as hackers, most true hackers consider
   them a separate and lower form of life.

   Ethical considerations aside, hackers figure that anyone who can't
   imagine a more interesting way to play with their computers than
   breaking into someone else's has to be pretty
                   losing
                   . Some
   other reasons crackers are looked down on are discussed in the
   entries on
                   cracking
                    and
                   phreaking
                   . See also

                   samurai
                   ,
                   dark-side hacker
                   , and
                   hacker ethic, the
                   .
   For a portrait of the typical teenage cracker, see

                    warez
                    .

cracking n. The act of breaking into a computer system;
   what a
                    cracker
                     does. Contrary to widespread myth, this does
   not usually involve some mysterious leap of hackerly brilliance,
   but rather persistence and the dogged repetition of a handful of
   fairly well-known tricks that exploit common weaknesses in the
   security of target systems. Accordingly, most crackers are only
   mediocre hackers.

crank vt. [from automotive slang] Verb used to describe the
   performance of a machine, especially sustained performance. "This
   box cranks (or, cranks at) about 6 megaflops, with a burst mode of
   twice that on vectorized operations."

CrApTeX /krap'tekh/ n. [University of York, England] Term
   of abuse used to describe TeX and LaTeX when they don't work (when
   used by TeXhackers), or all the time (by everyone else). The
   non-TeX-enthusiasts generally dislike it because it is more verbose
   than other formatters (e.g.
                    troff
) and because (particularly
   if the standard Computer Modern fonts are used) it generates vast
   output files. See
                    religious issues
                    ,
                    TeX
                    .

crash 1. n. A sudden, usually drastic failure. Most often
   said of the
                    system
                     (q.v., sense 1), esp. of magnetic disk
   drives (the term originally described what happened when the air
   gap of a hard disk collapses). "Three
                    luser
                    s lost their
   files in last night's disk crash." A disk crash that involves the
   read/write heads dropping onto the surface of the disks and
   scraping off the oxide may also be referred to as a 'head crash',
   whereas the term 'system crash' usually, though not always,
   implies that the operating system or other software was at fault.
   2. v. To fail suddenly. "Has the system just crashed?"
   "Something crashed the OS!" See
                    down
                    . Also used
   transitively to indicate the cause of the crash (usually a person
   or a program, or both). "Those idiots playing
                    SPACEWAR
                     crashed the system." 3. vi. Sometimes said of people hitting ←
                       the
   sack after a long
                    hacking run

                        ; see
                        gronk out
                        .

crash and burn vi.,n. A spectacular crash, in the mode of
   the conclusion of the car-chase scene in the movie "Bullitt"
   and many subsequent imitators (compare
                        die horribly
). Sun-3
   monitors losing the flyback transformer and lightning strikes on
   VAX-11/780 backplanes are notable crash and burn generators. The
   construction 'crash-and-burn machine' is reported for a computer
   used exclusively for alpha or
                        beta
                         testing, or reproducing
   bugs (i.e., not for development). The implication is that it
   wouldn't be such a disaster if that machine crashed, since only the
   testers would be inconvenienced.

crawling horror n. Ancient crufty hardware or software that
   is kept obstinately alive by forces beyond the control of the
   hackers at a site. Like
                        dusty deck
                         or
                        gonkulator
                        , but
   connotes that the thing described is not just an irritation but an
   active menace to health and sanity. "Mostly we code new stuff in
   C, but they pay us to maintain one big FORTRAN II application from
   nineteen-sixty-X that's a real crawling horror...." Compare

                        WOMBAT
                        .

cray /kray/ n. 1. (properly, capitalized) One of the line
   of supercomputers designed by Cray Research. 2. Any supercomputer
   at all. 3. The
                        canonical

                        number-crunching
                         machine.

   The term is actually the lowercased last name of Seymour Cray, a
   noted computer architect and co-founder of the company. Numerous
   vivid legends surround him, some true and some admittedly invented
   by Cray Research brass to shape their corporate culture and image.

cray instability n. 1. A shortcoming of a program or
   algorithm that manifests itself only when a large problem is being
   run on a powerful machine (see
                        cray
). Generally more subtle
   than bugs that can be detected in smaller problems running on a
   workstation or mini. 2. More specifically, a shortcoming of
   algorithms which are well behaved when run on gentle floating point
   hardware (such as IEEE-standard or DEC) but which break down badly
   when exposed to a Cray's unique 'rounding' rules.

crayola /kray-oh'l*/ n. A super-mini or -micro computer
   that provides some reasonable percentage of supercomputer
   performance for an unreasonably low price. Might also be a

                killer micro
                .

crayola books n. The
                rainbow series
                 of National
   Computer Security Center (NCSC) computer security standards (see

                Orange Book
). Usage: humorous and/or disparaging.

crayon n. 1. Someone who works on Cray supercomputers.
   More specifically, it implies a programmer, probably of the CDC
   ilk, probably male, and almost certainly wearing a tie
   (irrespective of gender). Systems types who have a Unix background
   tend not to be described as crayons. 2. A
                computron
                 (sense 2)
   that participates only in
                number-crunching
                . 3. A unit of
   computational power equal to that of a single Cray-1. There is a
   standard joke about this usage that derives from an old Crayola
   crayon promotional gimmick: When you buy 64 crayons you get a free
   sharpener.

creationism n. The (false) belief that large, innovative
   software designs can be completely specified in advance and then
   painlessly magicked out of the void by the normal efforts of a team
   of normally talented programmers. In fact, experience has shown
   repeatedly that good designs arise only from evolutionary,
   exploratory interaction between one (or at most a small handful of)
   exceptionally able designer(s) and an active user population ---
   and that the first try at a big new idea is always wrong.
   Unfortunately, because these truths don't fit the planning models
   beloved of
                management
                , they are generally ignored.

creep v. To advance, grow, or multiply inexorably. In
   hackish usage this verb has overtones of menace and silliness,
   evoking the creeping horrors of low-budget monster movies.

creeping elegance n. Describes a tendency for parts of a
   design to become
                elegant
                 past the point of diminishing return,
   something which often happens at the expense of the less
   interesting parts of the design, the schedule, and other things
   deemed important in the
                Real World
                . See also

                    creeping featurism
                    ,

                    second-system effect
                    ,
                    tense
                    .

creeping featurism /kree'ping fee'chr-izm/ n.
   1. Describes a systematic tendency to load more
                    chrome
                     and

                    feature
                    s onto systems at the expense of whatever elegance they
   may have possessed when originally designed. See also

                    feeping creaturism
                    . "You know, the main problem with
                    BSD
                     Unix
   has always been creeping featurism." 2. More generally, the tendency
   for anything complicated to become even more complicated because
   people keep saying "Gee, it would be even better if it had this
   feature too". (See
                    feature
                    .) The result is usually a
   patchwork because it grew one ad-hoc step at a time, rather than
   being planned. Planning is a lot of work, but it's easy to add
   just one extra little feature to help someone ... and then
   another ... and another.... When creeping featurism gets
   out of hand, it's like a cancer. Usually this term is used to
   describe computer programs, but it could also be said of the
   federal government, the IRS 1040 form, and new cars. A similar
   phenomenon sometimes afflicts conscious redesigns; see

                    second-system effect
                    . See also
                    creeping elegance
                    .

creeping featuritis /kree'ping fee'-chr-i:'t*s/ n.
   Variant of
                    creeping featurism
                    , with its own spoonerization:
   'feeping creaturitis'. Some people like to reserve this form for
   the disease as it actually manifests in software or hardware, as
   opposed to the lurking general tendency in designers' minds.
   (After all, -ism means 'condition' or 'pursuit of', whereas
   -itis usually means 'inflammation of'.)

cretin /kret'in/ or /kree'tn/ n. Congenital
                    loser
                    ;
   an obnoxious person; someone who can't do anything right. It has
   been observed that many American hackers tend to favor the British
   pronunciation /kret'in/ over standard American /kree'tn/; it is

thought this may be due to the insidious phonetic influence of
Monty Python's Flying Circus.

cretinous /kret'n-*s/ or /kreet'n-*s/ adj. Wrong;
   stupid; non-functional; very poorly designed. Also used
   pejoratively of people. See
                  dread high-bit disease
                   for an
   example. Approximate synonyms:
                  bletcherous

                  ,

                  bagbiting

                  losing

                  ,

                  brain-damaged

                  .

crippleware n. 1. Software that has some important
   functionality deliberately removed, so as to entice potential users
   to pay for a working version. 2. [Cambridge] Variety of

                  guiltware
                   that exhorts you to donate to some charity (compare

                  careware

                  ,

                  nagware
). 3. Hardware deliberately crippled,
   which can be upgraded to a more expensive model by a trivial change
   (e.g., cutting a jumper).

   An excellent example of crippleware (sense 3) is Intel's 486SX
   chip, which is a standard 486DX chip with the co-processor dyked
   out (in some early versions it was present but disabled). To
   upgrade, you buy a complete 486DX chip with *working*
   co-processor (its identity thinly veiled by a different pinout) and
   plug it into the board's expansion socket. It then disables the
   SX, which becomes a fancy power sink. Don't you love Intel?

critical mass n. In physics, the minimum amount of
   fissionable material required to sustain a chain reaction. Of a
   software product, describes a condition of the software such that
   fixing one bug introduces one plus
                  epsilon
                   bugs. (This malady
   has many causes:
                  creeping featurism
                  , ports to too many
   disparate environments, poor initial design, etc.) When software
   achieves critical mass, it can never be fixed; it can only be
   discarded and rewritten.

crlf /ker'l*f/, sometimes /kru'l*f/ or /C-R-L-F/ n.
   (often capitalized as 'CRLF') A carriage return (CR, ASCII 0001101)
   followed by a line feed (LF, ASCII 0001010). More loosely,
   whatever it takes to get you from the end of one line of text to

the beginning of the next line. See
              newline
              ,
              terpri
              .
   Under
              Unix
               influence this usage has become less common (Unix
   uses a bare line feed as its 'CRLF').

crock n.   [from the American scatologism 'crock of shit']
   1. An awkward feature or programming technique that ought to be
   made cleaner. For example, using small integers to represent error
   codes without the program interpreting them to the user (as in, for
   example, Unix 'make(1)', which returns code 139 for a process
   that dies due to
              segfault
). 2. A technique that works
   acceptably, but which is quite prone to failure if disturbed in the
   least. For example, a too-clever programmer might write an
   assembler which mapped instruction mnemonics to numeric opcodes
   algorithmically, a trick which depends far too intimately on the
   particular bit patterns of the opcodes. (For another example of
   programming with a dependence on actual opcode values, see

              The Story of Mel, a Real Programmer
               in Appendix A.)   Many crocks
   have a tightly woven, almost completely unmodifiable structure.
   See
              kluge
              ,
              brittle
              .   The adjectives 'crockish' and
   'crocky', and the nouns 'crockishness' and 'crockitude', are
   also used.

cross-post [Usenet] vi. To post a single article
   simultaneously to several newsgroups. Distinguished from posting
   the article repeatedly, once to each newsgroup, which causes people
   to see it multiple times (which is very bad form). Gratuitous
   cross-posting without a Followup-To line directing responses to a
   single followup group is frowned upon, as it tends to cause

              followup
               articles to go to inappropriate newsgroups when
   people respond to only one part of the original posting.

crudware /kruhd'weir/ n. Pejorative term for the hundreds
   of megabytes of low-quality
              freeware
               circulated by user's
   groups and BBS systems in the micro-hobbyist world. "Yet
   another set of disk catalog utilities for
              MS-DOS
              ?
   What crudware!"

cruft /kruhft/   [back-formation from
                 crufty
                 ] 1. n. An
   unpleasant substance. The dust that gathers under your bed is
   cruft; the TMRC Dictionary correctly noted that attacking it with a
   broom only produces more. 2. n. The results of shoddy
   construction. 3. vt. [from 'hand cruft', pun on 'hand craft']
   To write assembler code for something normally (and better) done by
   a compiler (see
                 hand-hacking
). 4. n. Excess; superfluous
   junk; used esp. of redundant or superseded code. 5. [University
   of Wisconsin] n. Cruft is to hackers as gaggle is to geese; that
   is, at UW one properly says "a cruft of hackers".

   This term is one of the oldest in the jargon and no one is sure of
   its etymology, but it is suggestive that there is a Cruft Hall at
   Harvard University which is part of the old physics building; it's
   said to have been the physics department's radar lab during WWII.
   To this day (early 1993) the windows appear to be full of random
   techno-junk. MIT or Lincoln Labs people may well have coined the
   term as a knock on the competition.

cruft together vt. (also 'cruft up') To throw together
   something ugly but temporarily workable. Like vt.
                 kluge up
                 ,
   but more pejorative. "There isn't any program now to reverse all
   the lines of a file, but I can probably cruft one together in about
   10 minutes." See
                 hack together
                 ,
                 hack up
                 ,
                 kluge up
                 ,

                 crufty
                 .

cruftsmanship /kruhfts'm*n-ship / n. [from
                 cruft
                 ]
   The antithesis of craftsmanship.

crufty /kruhf'tee/ adj. [origin unknown; poss. from
   'crusty' or 'cruddy'] 1. Poorly built, possibly over-complex.
   The
                 canonical
                  example is "This is standard old crufty

                 DEC
                  software". In fact, one fanciful theory of the origin of
   'crufty' holds that was originally a mutation of 'crusty'
   applied to DEC software so old that the 's' characters were tall
   and skinny, looking more like 'f' characters. 2. Unpleasant,
   especially to the touch, often with encrusted junk. Like spilled

coffee smeared with peanut butter and catsup. 3. Generally
unpleasant. 4. (sometimes spelled 'cruftie') n. A small crufty
object (see
              frob
              ); often one that doesn't fit well into the
scheme of things. "A LISP property list is a good place to store
crufties (or, collectively,
              random
               cruft)."

crumb n. Two binary digits; a
              quad
              . Larger than a

              bit
              , smaller than a
              nybble
              . Considered silly.
   Syn.
              tayste
              . General discussion of such terms is under

              nybble
              .

crunch 1. vi. To process, usually in a time-consuming or
   complicated way. Connotes an essentially trivial operation that is
   nonetheless painful to perform. The pain may be due to the
   triviality's being embedded in a loop from 1 to 1,000,000,000.
   "FORTRAN programs do mostly
              number-crunching
              ." 2. vt. To
   reduce the size of a file by a complicated scheme that produces bit
   configurations completely unrelated to the original data, such as
   by a Huffman code. (The file ends up looking something like a
   paper document would if somebody crunched the paper into a wad.)
   Since such compression usually takes more computations than simpler
   methods such as run-length encoding, the term is doubly
   appropriate. (This meaning is usually used in the construction
   'file crunch(ing)' to distinguish it from
              number-crunching
              .)
   See
              compress
              . 3. n. The character '#'. Used at XEROX
   and CMU, among other places. See
              ASCII
              . 4. vt. To squeeze
   program source into a minimum-size representation that will still
   compile or execute. The term came into being specifically for a
   famous program on the BBC micro that crunched BASIC source in order
   to make it run more quickly (it was a wholly interpretive BASIC, so
   the number of characters mattered).
              Obfuscated C Contest
                 entries are often crunched; see the first example under that ↵
                     entry.

cruncha cruncha cruncha /kruhn'ch* kruhn'ch* kruhn'ch*/ interj.
   An encouragement sometimes muttered to a machine
   bogged down in a serious
                grovel
                . Also describes a notional
   sound made by groveling hardware. See
                wugga wugga
                ,
                grind
                   (sense 3).

cryppie /krip'ee/ n. A cryptographer. One who hacks or
   implements cryptographic software or hardware.

CTSS /C-T-S-S/ n. Compatible Time-Sharing System. An
   early (1963) experiment in the design of interactive time-sharing
   operating systems, ancestral to
                Multics
                ,
                Unix
                , and

                ITS
                . The name
                ITS
                 (Incompatible Time-sharing System)
   was a hack on CTSS, meant both as a joke and to express some basic
   differences in philosophy about the way I/O services should be
   presented to user programs.

CTY /sit'ee/ or /C-T-Y/ n. [MIT] The terminal
   physically associated with a computer's system
                console
                . The
   term is a contraction of 'Console
                tty
                ', that is, 'Console
   TeleTYpe'. This
                ITS
                - and
                TOPS-10
                -associated term has
   become less common, as most Unix hackers simply refer to the CTY as
   'the console'.

cube n. 1. [short for 'cubicle'] A module in the
   open-plan offices used at many programming shops. "I've got the
   manuals in my cube." 2. A NeXT machine (which resembles a
   matte-black cube).

cubing vi. [parallel with 'tubing'] 1. Hacking on an IPSC
   (Intel Personal SuperComputer) hypercube. "Louella's gone cubing
   again!!" 2. Hacking Rubik's Cube or related puzzles,
   either physically or mathematically. 3. An indescribable form of
   self-torture (see sense 1 or 2).

cursor dipped in X n. There are a couple of metaphors in

English of the form 'pen dipped in X' (perhaps the most common
values of X are 'acid', 'bile', and 'vitriol'). These map
over neatly to this hackish usage (the cursor being what moves,
leaving letters behind, when one is composing on-line). "Talk
about a
              nastygram
              ! He must've had his cursor dipped in acid
when he wrote that one!"

cuspy /kuhs'pee/ adj. [WPI: from the
              DEC
               abbreviation CUSP, for 'Commonly Used System Program', i.e., a
   utility program used by many people] 1. (of a program)
   Well-written. 2. Functionally excellent. A program that performs
   well and interfaces well to users is cuspy. See
              rude
              .
   3. [NYU] Said of an attractive woman, especially one regarded as
   available. Implies a certain curvaceousness.

cut a tape vi. To write a software or document distribution
   on magnetic tape for shipment. Has nothing to do with physically
   cutting the medium! Early versions of this lexicon claimed that
   one never analogously speaks of 'cutting a disk', but this has
   since been reported as live usage. Related slang usages are
   mainstream business's 'cut a check', the recording industry's
   'cut a record', and the military's 'cut an order'.

   All of these usages reflect physical processes in obsolete
   recording and duplication technologies. The first stage in
   manufacturing an old-style vinyl record involved cutting grooves in
   a stamping die with a precision lathe. More mundanely, the
   dominant technology for mass duplication of paper documents in
   pre-photocopying days involved "cutting a stencil", punching away
   portions of the wax overlay on a silk screen. More directly,
   paper tape with holes punched in it was an important early storage
   medium.

cybercrud /si:'ber-kruhd/ n. 1. [coined by Ted Nelson]
   Obfuscatory tech-talk. Verbiage with a high
              MEGO
               factor. The
   computer equivalent of bureaucratese. 2. Incomprehensible stuff
   embedded in email. First there were the "Received" headers that
   show how mail flows through systems, then MIME (Multi-purpose
   Internet Mail Extensions) headers and part boundaries, and now huge
   blocks of hex for PEM (Privacy Enhanced Mail) or PGP (Pretty Good
   Privacy) digital signatures and certificates of authenticity. This
   stuff all services a purpose and good user interfaces should hide
   it, but all too often users are forced to wade through it.

cyberpunk /si:'ber-puhnk/ n.,adj. [orig. by SF writer
   Bruce Bethke and/or editor Gardner Dozois] A subgenre of SF
   launched in 1982 by William Gibson's epoch-making novel
   "Neuromancer" (though its roots go back through Vernor Vinge's
   "True Names" (see the
              Bibliography

                        in Appendix C) to
John Brunner's 1975 novel "The Shockwave Rider"). Gibson's
near-total ignorance of computers and the present-day hacker
culture enabled him to speculate about the role of computers and
hackers in the future in ways hackers have since found both
irritatingly na"ive and tremendously stimulating. Gibson's work
was widely imitated, in particular by the short-lived but
innovative "Max Headroom" TV series. See
                cyberspace
                ,

                ice
                ,
                jack in
                ,
                go flatline
                .

Since 1990 or so, popular culture has included a movement or
fashion trend that calls itself 'cyberpunk', associated especially
with the rave/techno subculture. Hackers have mixed feelings about
this. On the one hand, self-described cyberpunks too often seem to
be shallow trendoids in black leather who have substituted
enthusiastic blathering about technology for actually learning and
doing it. Attitude is no substitute for competence. On the
other hand, at least cyberpunks are excited about the right things
and properly respectful of hacking talent in those who have it.
The general consensus is to tolerate them politely in hopes that
they'll attract people who grow into being true hackers.

cyberspace /si:'ber-spays'/ n. 1. Notional
   'information-space' loaded with visual cues and navigable with
   brain-computer interfaces called 'cyberspace decks'; a
   characteristic prop of
                cyberpunk
                 SF. Serious efforts to
   construct
                virtual reality
                 interfaces modeled explicitly on
   Gibsonian cyberspace are under way, using more conventional devices
   such as glove sensors and binocular TV headsets. Few hackers are
   prepared to deny outright the possibility of a cyberspace someday
   evolving out of the network (see
                network, the
). 2. The
   Internet or
                Matrix
                 (sense #2) as a whole, considered as a
   crude cyberspace. As of 1996, hackers only rarely use the term
   this way because the Internet does not meet the high, SF-inspired
   standards they have for true cyberspace technology. Thus, this use
   of the term usually tags a
                wannabee
                 or outsider.
   3. Occasionally, the metaphoric location of the mind of a person in

                hack mode

. Some hackers report experiencing strong eidetic
imagery when in hack mode; interestingly, independent reports from
multiple sources suggest that there are common features to the
experience. In particular, the dominant colors of this subjective
'cyberspace' are often gray and silver, and the imagery often
involves constellations of marching dots, elaborate shifting
patterns of lines and angles, or moire patterns.

cycle 1. n. The basic unit of computation. What every
hacker wants more of (noted hacker Bill Gosper describes himself as
a "cycle junkie"). One can describe an instruction as taking so
many 'clock cycles'. Often the computer can access its memory
once on every clock cycle, and so one speaks also of 'memory
cycles'. These are technical meanings of
                cycle
                . The jargon
meaning comes from the observation that there are only so many
cycles per second, and when you are sharing a computer the cycles
get divided up among the users. The more cycles the computer
spends working on your program rather than someone else's, the
faster your program will run. That's why every hacker wants more
cycles: so he can spend less time waiting for the computer to
respond. 2. By extension, a notional unit of *human* thought
power, emphasizing that lots of things compete for the typical
hacker's think time. "I refused to get involved with the Rubik's
Cube back when it was big. Knew I'd burn too many cycles on it if
I let myself." 3. vt. Syn.
                bounce
                 (sense 4),
                120 reset
                ;
from the phrase 'cycle power'. "Cycle the machine again, that
serial port's still hung."

cycle crunch n. A situation wherein the number of people
trying to use a computer simultaneously has reached the point where
no one can get enough cycles because they are spread too thin and
the system has probably begun to
                thrash
                . This scenario is an
inevitable result of Parkinson's Law applied to timesharing.
Usually the only solution is to buy more computer. Happily, this
has rapidly become easier since the mid-1980s, so much so that the
very term 'cycle crunch' now has a faintly archaic flavor; most
hackers now use workstations or personal computers as opposed to
traditional timesharing systems.

cycle drought n. A scarcity of cycles. It may be due to a
                cycle crunch
                , but it could also occur because part of the
computer is temporarily not working, leaving fewer cycles to go
around. "The
                high moby
                 is
                down
                , so we're running with

   only half the usual amount of memory. There will be a cycle
   drought until it's fixed."

cycle of reincarnation n. [coined in a paper by T. H. Myer
   and I.E. Sutherland "On the Design of Display Processors", Comm.
   ACM, Vol. 11, no. 6, June 1968)] Term used to refer to a well-known
   effect whereby function in a computing system family is migrated
   out to special-purpose peripheral hardware for speed, then the
   peripheral evolves toward more computing power as it does its job,
   then somebody notices that it is inefficient to support two
   asymmetrical processors in the architecture and folds the function
   back into the main CPU, at which point the cycle begins again.

   Several iterations of this cycle have been observed in
   graphics-processor design, and at least one or two in
   communications and floating-point processors. Also known as 'the
   Wheel of Life', 'the Wheel of Samsara', and other variations of
   the basic Hindu/Buddhist theological idea. See also
              blitter
              ,

              bit bang
              .

cycle server n. A powerful machine that exists primarily
   for running large
              batch
               jobs. Implies that interactive tasks
   such as editing are done on other machines on the network, such as
   workstations.

cypherpunk n. [from
              cyberpunk
              ] Someone interested in the
   uses of encryption via electronic ciphers for enhancing personal
   privacy and guarding against tyranny by centralized, authoritarian
   power structures, especially government. There is an active
   cypherpunks mailing list at cypherpunks-request@toad.com
   coordinating work on public-key encryption freeware, privacy, and
   digital cash. See also
              tentacle
              .

1.9   D

              D. C. Power Lab n. The former site of
              SAIL
              . Hackers
   thought this was very funny because the obvious connection to
   electrical engineering was nonexistent -- the lab was named for a
   Donald C. Power. Compare
              Marginal Hacks
              .

daemon /day'mn/ or /dee'mn/ n. [from the mythological
   meaning, later rationalized as the acronym 'Disk And Execution
   MONitor'] A program that is not invoked explicitly, but lies
   dormant waiting for some condition(s) to occur. The idea is that
   the perpetrator of the condition need not be aware that a daemon is
   lurking (though often a program will commit an action only because
   it knows that it will implicitly invoke a daemon). For example,
   under
                ITS
                 writing a file on the
                LPT
                 spooler's directory
   would invoke the spooling daemon, which would then print the file.
   The advantage is that programs wanting (in this example) files
   printed need neither compete for access to nor understand any
   idiosyncrasies of the
                LPT
                . They simply enter their implicit
   requests and let the daemon decide what to do with them. Daemons
   are usually spawned automatically by the system, and may either
   live forever or be regenerated at intervals.

   Daemon and
                demon
                 are often used interchangeably, but seem to
   have distinct connotations. The term 'daemon' was introduced to
   computing by
                CTSS
                 people (who pronounced it /dee'mon/) and
   used it to refer to what ITS called a
                dragon
                . Although the
   meaning and the pronunciation have drifted, we think this glossary
   reflects current (1996) usage.

daemon book n. "The Design and Implementation of the
   4.3BSD UNIX Operating System", by Samuel J. Leffler, Marshall Kirk
   McKusick, Michael J. Karels, and John S. Quarterman (Addison-Wesley
   Publishers, 1989, ISBN 0-201-06196-1) -- the standard reference
   book on the internals of
                BSD
                 Unix. So called because the
   cover has a picture depicting a little devil (a visual play on

                daemon
) in sneakers, holding a pitchfork (referring to one of
   the characteristic features of Unix, the 'fork(2)' system
   call). Also known as the
                Devil Book
                .

dahmum /dah'mum/ n. [Usenet] The material of which
   protracted
                flame war
                s, especially those about operating
   systems, are comprised. Homeomorphic to
                spam

.   The term
   'dahmum' is derived from the name of a militant
                 OS/2
                   advocate, and originated when an extensively crossposted
   OS/2-versus-
                 Linux
                  debate was fed through
                 Dissociated Press
                 .

dangling pointer n. A reference that doesn't actually lead
   anywhere (in C and some other languages, a pointer that doesn't
   actually point at anything valid). Usually this happens because it
   formerly pointed to something that has moved or disappeared. Used
   as jargon in a generalization of its techspeak meaning; for
   example, a local phone number for a person who has since moved to
   the other coast is a dangling pointer. Compare
                 dead link
                 .

dark-side hacker n. A criminal or malicious hacker; a

                 cracker
                 . From George Lucas's Darth Vader, "seduced by the
   dark side of the Force". The implication that hackers form a sort
   of elite of technological Jedi Knights is intended. Oppose

                 samurai
                 .

Datamation /day't*-may'sh*n/ n. A magazine that many
   hackers assume all
                 suit
                 s read. Used to question an unbelieved
   quote, as in "Did you read that in "Datamation?"" (But see
   below; this slur may be dated by the time you read this.) It used
   to publish something hackishly funny every once in a while, like
   the original paper on
                 COME FROM
                  in 1973, and Ed Post's
   "Real Programmers Don't Use Pascal" ten years later, but for
   a long time after that it was much more exclusively

                 suit
                 -oriented and boring. Following a change of editorship in
   1994, Datamation is trying for more of the technical content and
   irreverent humor that marked its early days.

DAU /dow/ [German FidoNet] n. German acronym for
   D"ummster Anzunehmender User (stupidest imaginable user).
   From the engineering-slang GAU for Gr"osster Anzunehmender
   Unfall, worst foreseeable accident, esp. of a LNG tank farm plant
   or something with similarly disastrous consequences. In popular
   German, GAU is used only to refer to worst-case nuclear acidents
   such as a core meltdown. See
                 cretin
                 ,

                    fool
                    ,
                    loser
                     and

                    weasel
                    .

day mode n. See
                    phase
                     (sense 1). Used of people only.

dd /dee-dee/ vt. [Unix: from IBM
                    JCL
                    ] Equivalent to

                    cat
                     or
                    BLT
                    . Originally the name of a Unix copy command
    with special options suitable for block-oriented devices; it was
    often used in heavy-handed system maintenance, as in "Let's
    'dd' the root partition onto a tape, then use the boot PROM to
    load it back on to a new disk". The Unix 'dd(1)' was
    designed with a weird, distinctly non-Unixy keyword option syntax
    reminiscent of IBM System/360 JCL (which had an elaborate DD
    'Dataset Definition' specification for I/O devices); though the
    command filled a need, the interface design was clearly a prank.
    The jargon usage is now very rare outside Unix sites and now nearly
    obsolete even there, as 'dd(1)' has been
                    deprecated
                     for a
    long time (though it has no exact replacement). The term has been
    displaced by
                    BLT
                     or simple English 'copy'.

DDT /D-D-T/ n. 1. Generic term for a program that assists
    in debugging other programs by showing individual machine
    instructions in a readable symbolic form and letting the user
    change them. In this sense the term DDT is now archaic, having
    been widely displaced by 'debugger' or names of individual
    programs like 'adb', 'sdb', 'dbx', or 'gdb'.
    2. [ITS] Under MIT's fabled
                    ITS
                     operating system, DDT (running
    under the alias HACTRN) was also used as the
                    shell
                     or top
    level command language used to execute other programs. 3. Any one
    of several specific DDTs (sense 1) supported on early
                    DEC
                     hardware. The DEC PDP-10 Reference Handbook (1969) contained a
    footnote on the first page of the documentation for DDT that
    illuminates the origin of the term:

      Historical footnote: DDT was developed at MIT for the PDP-1

computer in 1961. At that time DDT stood for "DEC Debugging
Tape". Since then, the idea of an on-line debugging program has
propagated throughout the computer industry. DDT programs are
now available for all DEC computers. Since media other than tape
are now frequently used, the more descriptive name "Dynamic
Debugging Technique" has been adopted, retaining the DDT
abbreviation. Confusion between DDT-10 and another well known
pesticide, dichloro-diphenyl-trichloroethane (C14-H9-Cl5) should
be minimal since each attacks a different, and apparently
mutually exclusive, class of bugs.

(The 'tape' referred to was, incidentally, not magnetic but paper.)
Sadly, this quotation was removed from later editions of the
handbook after the
                suit
                s took over and DEC became much more
'businesslike'.

The history above is known to many old-time hackers. But there's
more: Peter Samson, compiler of the original
                TMRC
                 lexicon,
reports that he named 'DDT' after a similar tool on the TX-0
computer, the direct ancestor of the PDP-1 built at MIT's Lincoln
Lab in 1957. The debugger on that ground-breaking machine (the
first transistorized computer) rejoiced in the name FLIT
(FLexowriter Interrogation Tape).

de-rezz /dee-rez'/ [from 'de-resolve' via the movie
   "Tron"] (also 'derez') 1. vi. To disappear or dissolve; the
   image that goes with it is of an object breaking up into raster
   lines and static and then dissolving. Occasionally used of a
   person who seems to have suddenly 'fuzzed out' mentally rather than
   physically. Usage: extremely silly, also rare. This verb was
   actually invented as *fictional* hacker jargon, and adopted in
   a spirit of irony by real hackers years after the fact. 2. vt. The
   Macintosh resource decompiler. On a Macintosh, many program
   structures (including the code itself) are managed in small
   segments of the program file known as 'resources'; 'Rez' and
   'DeRez' are a pair of utilities for compiling and decompiling
   resource files. Thus, decompiling a resource is 'derezzing'.
   Usage: very common.

dead adj. 1. Non-functional;
                down
                ;
                crash
                ed.
   Especially used of hardware. 2. At XEROX PARC, software that is
   working but not undergoing continued development and support.
   3. Useless; inaccessible. Antonym: 'live'. Compare
                dead code
                .

dead code n. Routines that can never be accessed because
   all calls to them have been removed, or code that cannot be reached
   because it is guarded by a control structure that provably must

    always transfer control somewhere else. The presence of dead code
    may reveal either logical errors due to alterations in the program
    or significant changes in the assumptions and environment of the
    program (see also
                software rot
                ); a good compiler should report
    dead code so a maintainer can think about what it means.
    (Sometimes it simply means that an *extremely* defensive
    programmer has inserted
                can't happen
                 tests which really can't
    happen -- yet.) Syn.
                grunge
                . See also
                dead
                , and

                The Story of Mel, a Real Programmer
                .

dead link n.   [WWW] A World-Wide-Web URL that no longer
    points to the information it was written to reach. Usually this
    happens because the document has been moved or deleted. Lots of
    dead links make a WWW page frustrating and useless and are the #1
    sign of poor page maintainance. Compare
                dangling pointer
                .

DEADBEEF /ded-beef/ n.   The hexadecimal word-fill pattern
    for freshly allocated memory (decimal -21524111) under a number of
    IBM environments, including the RS/6000. Some modern debugging
    tools deliberately fill freed memory with this value as a way of
    converting
                heisenbug
                s into
                Bohr bug
                s. As in "Your
    program is DEADBEEF" (meaning gone, aborted, flushed from memory);
    if you start from an odd half-word boundary, of course, you have
    BEEFDEAD. See also the anecdote under
                fool
                .

deadlock n.   1. [techspeak] A situation wherein two or more
    processes are unable to proceed because each is waiting for one of
    the others to do something. A common example is a program
    communicating to a server, which may find itself waiting for output
    from the server before sending anything more to it, while the
    server is similarly waiting for more input from the controlling
    program before outputting anything. (It is reported that this
    particular flavor of deadlock is sometimes called a 'starvation
    deadlock', though the term 'starvation' is more properly used for
    situations where a program can never run simply because it never
    gets high enough priority. Another common flavor is
    'constipation', in which each process is trying to send stuff to
    the other but all buffers are full because nobody is reading
    anything.) See

```
                    deadly embrace
                    . 2. Also used of deadlock-like
   interactions between humans, as when two people meet in a narrow
   corridor, and each tries to be polite by moving aside to let the
   other pass, but they end up swaying from side to side without
   making any progress because they always move the same way at the
   same time.
```

deadly embrace n. Same as
                    deadlock
                    , though usually
   used only when exactly two processes are involved. This is the
   more popular term in Europe, while
                    deadlock
                     predominates in
   the United States.

death code n. A routine whose job is to set everything in
   the computer -- registers, memory, flags, everything -- to zero,
   including that portion of memory where it is running; its last act
   is to stomp on its own "store zero" instruction. Death code
   isn't very useful, but writing it is an interesting hacking
   challenge on architectures where the instruction set makes it
   possible, such as the PDP-8 (it has also been done on the DG Nova).

   Perhaps the ultimate death code is on the TI 990 series, where all
   registers are actually in RAM, and the instruction "store
   immediate 0" has the opcode "0". The PC will immediately wrap
   around core as many times as it can until a user hits HALT. Any
   empty memory location is death code. Worse, the manufacturer
   recommended use of this instruction in startup code (which would be
   in ROM and therefore survive).

Death Square n. The corporate logo of Novell, the people
   who acquired USL after AT&T let go of it (Novell eventually sold
the
   Unix group to SCO). Coined by analogy with
                    Death Star
                    ,
   because many people believed Novell was bungling the lead in
   Unix systems exactly as AT&T did for many years.

Death Star n. [from the movie "Star Wars"] 1. The
   AT&T corporate logo, which appears on computers sold by AT&T and
   bears an uncanny resemblance to the Death Star in the movie. This
   usage is particularly common among partisans of
                    BSD
                     Unix, who
   tend to regard the AT&T versions as inferior and AT&T as a bad guy.
   Copies still circulate of a poster printed by Mt. Xinu showing a
   starscape with a space fighter labeled 4.2 BSD streaking away from
   a broken AT&T logo wreathed in flames. 2. AT&T's internal
   magazine, "Focus", uses 'death star' to describe an
   incorrectly done AT&T logo in which the inner circle in the top
   left is dark instead of light -- a frequent result of
   dark-on-light logo images.

DEC n. Commonly used abbreviation for Digital Equipment
   Corporation, now deprecated by DEC itself in favor of "Digital".
   Before the
                killer micro
                 revolution of the late 1980s,
   hackerdom was closely symbiotic with DEC's pioneering timesharing
   machines. The first of the group of cultures described by this
   lexicon nucleated around the PDP-1 (see
                TMRC
                . Subsequently,
   the PDP-6,
                PDP-10
                ,
                PDP-20
                , PDP-11 and
                VAX
                 were all
   foci of large and important hackerdoms, and DEC machines long
   dominated the ARPANET and Internet machine population. DEC was the
   technological leader of the minicomputer era (roughly 1967 to
   1987), but its failure to embrace microcomputers and Unix early
   cost it heavily in profits and prestige after
                silicon
                 got
   cheap. The microprocessor design tradition owes a heavy debt to
   the PDP-11 instruction set, and every one one of the major
   general-purpose microcomputer OSs so far (CP/M, MS-DOS, Unix, OS/2,
   Windows NT) were either genetically descended from a DEC OS, or
   incubated on DEC hardware, or both. Accordingly, DEC is still
   regarded with a certain wry affection even among many hackers too
   young to have grown up on DEC machines. The contrast with
                IBM
                   is instructive.

   [1996 update: DEC has gradually been reclaiming some of its old
   reputation among techies in the last five years. The success of
   the Alpha, an innovatively-designed and very high-performance

                killer micro
                , has helped a lot. So has DEC's newfound
   receptiveness to Unix and open systems in general --ESR]

dec /dek/ v. Verbal (and only rarely written) shorthand
   for decrement, i.e. 'decrease by one'. Especially used by
   assembly programmers, as many assembly languages have a 'dec'
   mnemonic. Antonym:
                inc
                .

DEC Wars n. A 1983
                Usenet
                 posting by Alan Hastings and
   Steve Tarr spoofing the "Star Wars" movies in hackish terms.
   Some years later, ESR (disappointed by Hastings and Tarr's failure
   to exploit a great premise more thoroughly) posted a 3-times-longer
   complete rewrite called "Unix WARS"; the two are often
   confused.

decay n.,vi [from nuclear physics] An automatic conversion which
   is applied to most array-valued expressions in
               C
               ; they 'decay
   into' pointer-valued expressions pointing to the array's first
   element. This term is borderline techspeak, but is not used in the
   official standard for the language.

DEChead /dek'hed/ n. 1. A
               DEC

               field servoid
               .
   Not flattering. 2. [from 'deadhead'] A Grateful Dead fan working
   at DEC.

deckle /dek'l/ n. [from dec- and
               nybble
               ; the original
   spelling seems to have been 'decle'] Two
               nickle
               s; 10
   bits. Reported among developers for Mattel's GI 1600 (the
   Intellivision games processor), a chip with 16-bit-wide RAM but
   10-bit-wide ROM. See
               nybble
                for other such terms.

DED /D-E-D/ n. Dark-Emitting Diode (that is, a burned-out
   LED). Compare
               SED
               ,
               LER
               ,
               write-only memory
               . In the
   early 1970s both Signetics and Texas instruments released DED spec
   sheets as
               AFJ
               s (suggested uses included "as a power-off
   indicator").

deep hack mode n. See
               hack mode
               .

deep magic n. [poss. from C. S. Lewis's "Narnia"
   books] An awesomely arcane technique central to a program or
   system, esp. one neither generally published nor available to
   hackers at large (compare
               black art
               ); one that could only have
   been composed by a true
               wizard
               . Compiler optimization
   techniques and many aspects of

                         OS
                          design used to be
                         deep magic
                         ;
      many techniques in cryptography, signal processing,
      graphics, and AI still are. Compare
                         heavy wizardry
                         . Esp.
      found in comments of the form "Deep magic begins here...".
      Compare
                         voodoo programming
                         .

deep space n. 1. Describes the notional location of any
      program that has gone
                         off the trolley
                         . Esp. used of
      programs that just sit there silently grinding long after either
      failure or some output is expected. "Uh oh. I should have gotten
      a prompt ten seconds ago. The program's in deep space somewhere."
      Compare
                         buzz
                         ,
                         catatonic
                         ,
                         hyperspace
                         . 2. The
      metaphorical location of a human so dazed and/or confused or caught
      up in some esoteric form of
                         bogosity
                          that he or she no longer
      responds coherently to normal communication. Compare
                         page out
                         .

defenestration n. [from the traditional Czechoslovakian
      method of assassinating prime ministers, via SF fandom] 1. Proper
      karmic retribution for an incorrigible punster. "Oh, ghod, that
      was *awful*!" "Quick! Defenestrate him!" 2. The act of
      exiting a window system in order to get better response time from a
      full-screen program. This comes from the dictionary meaning of
      'defenestrate', which is to throw something out a window. 3. The
      act of discarding something under the assumption that it will
      improve matters. "I don't have any disk space left." "Well,
      why don't you defenestrate that 100 megs worth of old core dumps?"
      4. Under a GUI, the act of dragging something out of a window
      (onto the screen). "Next, defenestrate the MugWump icon."
      5. [proposed] The requirement to support a command-line interface.
      "It has to run on a VT100." "Curses! I've been
      defenestrated!"

defined as adj. In the role of, usually in an
      organization-chart sense. "Pete is currently defined as bug
      prioritizer." Compare
                         logical
                         .

dehose /dee-hohz/ vt. To clear a
                hosed
                 condition.

delint /dee-lint/ v.,obs. To modify code to remove
   problems detected when
                lint
                ing. Confusingly, this process is
   also referred to as 'linting' code. This term is no longer in
   general use because ANSI C compilers typically issue compile-time
   warnings as detailed as lint warnings.

delta n. 1. [techspeak] A quantitative change, especially a
   small or incremental one (this use is general in physics and
   engineering). "I just doubled the speed of my program!" "What
   was the delta on program size?" "About 30 percent." (He
   doubled the speed of his program, but increased its size by only 30
   percent.) 2. [Unix] A
                diff
                , especially a
                diff
                 stored
   under the set of version-control tools called SCCS (Source Code
   Control System) or RCS (Revision Control System). 3. n. A small
   quantity, but not as small as
                epsilon
                . The jargon usage of

                delta
                 and
                epsilon
                 stems from the traditional use of these
   letters in mathematics for very small numerical quantities,
   particularly in 'epsilon-delta' proofs in limit theory (as in the
   differential calculus). The term
                delta
                 is often used, once

                epsilon
                 has been mentioned, to mean a quantity that is
   slightly bigger than
                epsilon
                 but still very small. "The cost
   isn't epsilon, but it's delta" means that the cost isn't totally
   negligible, but it is nevertheless very small. Common
   constructions include 'within delta of ---', 'within epsilon of
   ---': that is, 'close to' and 'even closer to'.

demented adj. Yet another term of disgust used to describe
   a program. The connotation in this case is that the program works
   as designed, but the design is bad. Said, for example, of a
   program that generates large numbers of meaningless error messages,
   implying that it is on the brink of imminent collapse. Compare

                wonky
                ,
                bozotic

.

demigod n. A hacker with years of experience, a national
   reputation, and a major role in the development of at least one
   design, tool, or game used by or known to more than half of the
   hacker community. To qualify as a genuine demigod, the person must
   recognizably identify with the hacker community and have helped
   shape it. Major demigods include Ken Thompson and Dennis Ritchie
   (co-inventors of
                Unix
                 and
                C
                ), Richard M. Stallman
   (inventor of
                EMACS
                ), and Linus Torvalds (inventor of Linux).
   In their hearts of hearts, most hackers dream of someday becoming
   demigods themselves, and more than one major software project has
   been driven to completion by the author's veiled hopes of
   apotheosis. See also
                net.god
                ,
                true-hacker
                .

demo /de'moh/ [short for 'demonstration'] 1. v. To
   demonstrate a product or prototype. A far more effective way of
   inducing bugs to manifest than any number of
                test
                 runs,
   especially when important people are watching. 2. n. The act of
   demoing. "I've gotta give a demo of the drool-proof interface;
   how does it work again?" 3. n. Esp. as 'demo version', can
   refer either to an early, barely-functional version of a program
   which can be used for demonstration purposes as long as the
   operator uses *exactly* the right commands and skirts its numerous
   bugs, deficiencies, and unimplemented portions, or to a special
   version of a program (frequently with some features crippled) which
   is distributed at little or no cost to the user for enticement
   purposes.

demo mode n. 1. [Sun] The state of being
                heads down
                   in order to finish code in time for a
                demo
                , usually due
   yesterday. 2. A mode in which video games sit by themselves
   running through a portion of the game, also known as 'attract
   mode'. Some serious
                app
                s have a demo mode they use as a
   screen saver, or may go through a demo mode on startup (for
   example, the Microsoft Windows opening screen -- which lets you
   impress your neighbors without actually having to put up with

                Microsloth Windows
).

demon n.   1. [MIT] A portion of a program that is not
    invoked explicitly, but that lies dormant waiting for some
    condition(s) to occur. See
                    daemon
                    . The distinction is that
    demons are usually processes within a program, while daemons are
    usually programs running on an operating system. 2. [outside MIT]
    Often used equivalently to
                    daemon
                     -- especially in the

                    Unix
                     world, where the latter spelling and pronunciation is
    considered mildly archaic.

    Demons in sense 1 are particularly common in AI programs. For
    example, a knowledge-manipulation program might implement inference
    rules as demons. Whenever a new piece of knowledge was added,
    various demons would activate (which demons depends on the
    particular piece of data) and would create additional pieces of
    knowledge by applying their respective inference rules to the
    original piece. These new pieces could in turn activate more
    demons as the inferences filtered down through chains of logic.
    Meanwhile, the main program could continue with whatever its
    primary task was.

demon dialer n. A program which repeatedly calls the same
    telephone number. Demon dialing may be benign (as when a number of
    communications programs contend for legitimate access to a
                    BBS
                     line) or malign (that is, used as a prank or denial-of-service
    attack). This term dates from the
                    blue box
                     days of the 1970s
    and early 1980s and is now semi-obsolescent among
                    phreaker
                    s;
    see
                    war dialer
                     for its contemporary progeny.

depeditate /dee-ped'*-tayt/ n. [by (faulty) analogy with
    'decapitate'] Humorously, to cut off the feet of. When one is
    using some computer-aided typesetting tools, careless placement of
    text blocks within a page or above a rule can result in chopped-off
    letter descenders. Such letters are said to have been depeditated.

deprecated adj. Said of a program or feature that is
    considered obsolescent and in the process of being phased out,
    usually in favor of a specified replacement. Deprecated features
    can, unfortunately, linger on for many years. This term appears
    with distressing frequency in standards documents when the
    committees writing the documents realize that large amounts of
    extant (and presumably happily working) code depend on the
    feature(s) that have passed out of favor. See also
                    dusty deck

.

derf /derf/ v.,n. [PLATO] The act of exploiting a
   terminal which someone else has absent-mindedly left logged on, to
   use that person's account, especially to post articles intended to
   make an ass of the victim you're impersonating.

deserves to lose adj. Said of someone who willfully does
   the
                  Wrong Thing
                  ; humorously, if one uses a feature known to be

                  marginal
                  . What is meant is that one deserves the consequences
   of one's
                  losing
                   actions. "Boy, anyone who tries to use

                  mess-dos
                   deserves to
                  lose
                  !" (
                  ITS
                   fans used to say
   the same thing of
                  Unix
                  ; many still do.) See also
                  screw
                  ,

                  chomp
                  ,
                  bagbiter
                  .

desk check n.,v. To
                  grovel
                   over hardcopy of source
   code, mentally simulating the control flow; a method of catching
   bugs. No longer common practice in this age of on-screen editing,
   fast compiles, and sophisticated debuggers -- though some maintain
   stoutly that it ought to be. Compare
                  eyeball search
                  ,

                  vdiff
                  ,
                  vgrep
                  .

despew /d*-spyoo'/ v. [Usenet] To automatically generate
   a large amount of garbage to the net, esp. from an automated
   posting program gone wild. See
                  ARMM
                  .

Devil Book n. See

daemon book
, the term preferred by
its authors.

devo /dee'voh/ n. [orig. in-house jargon at Symbolics] A
   person in a development group.   See also
                doco
                 and
                mango
                .

dickless workstation n. Extremely pejorative hackerism for
   'diskless workstation', a class of botches including the Sun 3/50
   and other machines designed exclusively to network with an
   expensive central disk server.   These combine all the disadvantages
   of time-sharing with all the disadvantages of distributed personal
   computers; typically, they cannot even
                boot
                 themselves without
   help (in the form of some kind of
                breath-of-life packet
) from
   the server.

dictionary flame n.   [Usenet] An attempt to sidetrack a
   debate away from issues by insisting on meanings for key terms that
   presuppose a desired conclusion or smuggle in an implicit premise.
   A common tactic of people who prefer argument over definitions to
   disputes about reality.   Compare
                spelling flame
                .

diddle 1. vt. To work with or modify in a not particularly
   serious manner.   "I diddled a copy of
                ADVENT
                 so it didn't
   double-space all the time."   "Let's diddle this piece of code and
   see if the problem goes away."   See
                tweak
                 and
                twiddle
                .
   2. n. The action or result of diddling.   See also
                tweak
                ,
                twiddle
                ,
                frob
                .

die v.   Syn.
                crash
                . Unlike
                crash
                , which is used
   primarily of hardware, this verb is used of both hardware and

software. See also
                go flatline
                ,
                casters-up mode
                .

die horribly v. The software equivalent of
                crash and burn
                ,
    and the preferred emphatic form of
                die
                . "The
    converter choked on an FF in its input and died horribly".

diff /dif/ n. 1. A change listing, especially giving
    differences between (and additions to) source code or documents
    (the term is often used in the plural 'diffs'). "Send me your
    diffs for the Jargon File!" Compare
                vdiff
                . 2. Specifically,
    such a listing produced by the 'diff(1)' command, esp. when
    used as specification input to the 'patch(1)' utility (which
    can actually perform the modifications; see
                patch
). This is a
    common method of distributing patches and source updates in the
    Unix/C world. 3. v. To compare (whether or not by use of automated
    tools on machine-readable files); see also
                vdiff
                ,
                mod
                .

digit n. An employee of Digital Equipment Corporation. See
    also
                VAX
                ,
                VMS
                ,
                PDP-10
                ,
                TOPS-10
                ,
                DEChead
                ,

                double DECkers
                ,
                field circus
                .

dike vt. To remove or disable a portion of something, as a
    wire from a computer or a subroutine from a program. A standard
    slogan is "When in doubt, dike it out". (The implication is that
    it is usually more effective to attack software problems by
    reducing complexity than by increasing it.) The word 'dikes' is
    widely used among mechanics and engineers to mean 'diagonal

cutters', esp. the heavy-duty metal-cutting version, but may also
refer to a kind of wire-cutters used by electronics techs. To
'dike something out' means to use such cutters to remove
something. Indeed, the TMRC Dictionary defined dike as "to attack
with dikes". Among hackers this term has been metaphorically
extended to informational objects such as sections of code.

ding n.,vi. 1. Synonym for
             feep
             . Usage: rare among
hackers, but commoner in the
             Real World
             . 2. 'dinged': What
happens when someone in authority gives you a minor bitching about
something, esp. something trivial. "I was dinged for having a
messy desk."

dink /dink/ adj. Said of a machine that has the
             bitty box
             nature; a machine too small to be worth bothering with ---
sometimes the system you're currently forced to work on. First
heard from an MIT hacker working on a CP/M system with 64K, in
reference to any 6502 system, then from fans of 32-bit
architectures about 16-bit machines. "GNUMACS will never work on
that dink machine." Probably derived from mainstream 'dinky',
which isn't sufficiently pejorative. See
             macdink
             .

dinosaur n. 1. Any hardware requiring raised flooring and
special power. Used especially of old minis and mainframes, in
contrast with newer microprocessor-based machines. In a famous
quote from the 1988 Unix EXPO, Bill Joy compared the liquid-cooled
mainframe in the massive IBM display with a grazing dinosaur "with
a truck outside pumping its bodily fluids through it". IBM was
not amused. Compare
             big iron
             ; see also
             mainframe
             .
2. [IBM] A very conservative user; a
             zipperhead
             .

dinosaur pen n. A traditional
             mainframe
             computer room
complete with raised flooring, special power, its own
ultra-heavy-duty air conditioning, and a side order of Halon fire
extinguishers. See
             boa
             .

dinosaurs mating n. Said to occur when yet another
             big iron
             merger or buyout occurs; reflects a perception by hackers
that these signal another stage in the long, slow dying of the

                    mainframe
                     industry. In its glory days of the 1960s, it was
   'IBM and the Seven Dwarves': Burroughs, Control Data, General
   Electric, Honeywell, NCR, RCA, and Univac. RCA and GE sold out
   early, and it was 'IBM and the Bunch' (Burroughs, Univac, NCR,
   Control Data, and Honeywell) for a while. Honeywell was bought out
   by Bull; Burroughs merged with Univac to form Unisys (in 1984 ---
   this was when the phrase 'dinosaurs mating' was coined); and in
   1991 AT&T absorbed NCR. More such earth-shaking unions of doomed
   giants seem inevitable.

dirtball n.   [XEROX PARC] A small, perhaps struggling
   outsider; not in the major or even the minor leagues. For example,
   "Xerox is not a dirtball company".

   [Outsiders often observe in the PARC culture an institutional
   arrogance which usage of this term exemplifies. The brilliance and
   scope of PARC's contributions to computer science have been such
   that this superior attitude is not much resented. -- ESR]

dirty power n. Electrical mains voltage that is unfriendly
   to the delicate innards of computers. Spikes,
                    drop-outs
                    ,
   average voltage significantly higher or lower than nominal, or just
   plain noise can all cause problems of varying subtlety and severity
   (these are collectively known as
                    power hit
                    s).

disclaimer n.   [Usenet] Statement ritually appended to many
   Usenet postings (sometimes automatically, by the posting software)
   reiterating the fact (which should be obvious, but is easily
   forgotten) that the article reflects its author's opinions and not
   necessarily those of the organization running the machine through
   which the article entered the network.

Discordianism /dis-kor'di-*n-ism/ n. The veneration of

                    Eris
                    , a.k.a. Discordia; widely popular among hackers.
   Discordianism was popularized by Robert Shea and Robert Anton
   Wilson's novel "
                    Illuminatus!
                    " as a sort of
   self-subverting Dada-Zen for Westerners -- it should on no account
   be taken seriously but is far more serious than most jokes.
   Consider, for example, the Fifth Commandment of the Pentabarf, from
   "Principia Discordia": "A Discordian is Prohibited of
   Believing What he Reads." Discordianism is usually connected with
   an elaborate conspiracy theory/joke involving millennia-long
   warfare between the anarcho-surrealist partisans of Eris and a
   malevolent, authoritarian secret society called the Illuminati.
   See
                    Religion
                     in Appendix B,

                    Church of the SubGenius
                    , and

                    ha ha only serious
                    .

disk farm n. (also
                    laundromat
) A large room or rooms
    filled with disk drives (esp.
                    washing machine
                    s).

display hack n. A program with the same approximate purpose
    as a kaleidoscope: to make pretty pictures. Famous display hacks
    include
                    munching squares
                    ,
                    smoking clover
                    , the BSD Unix
    `rain(6)' program, `worms(6)' on miscellaneous Unixes,
    and the
                    X
                     `kaleid(1)' program. Display hacks can also be
    implemented without programming by creating text files containing
    numerous escape sequences for interpretation by a video terminal;
    one notable example displayed, on any VT100, a Christmas tree with
    twinkling lights and a toy train circling its base. The
                    hack value
                     of a display hack is proportional to the esthetic value of
    the images times the cleverness of the algorithm divided by the
    size of the code. Syn.
                    psychedelicware
                    .

Dissociated Press n. [play on `Associated Press'; perhaps
    inspired by a reference in the 1949 Bugs Bunny cartoon
    "What's Up, Doc?"] An algorithm for transforming any text
    into potentially humorous garbage even more efficiently than by
    passing it through a
                    marketroid
                    . The algorithm starts by
    printing any N consecutive words (or letters) in the text.
    Then at every step it searches for any random occurrence in the
    original text of the last N words (or letters) already
    printed and then prints the next word or letter.
                    EMACS
                     has a
    handy command for this. Here is a short example of word-based
    Dissociated Press applied to an earlier version of this Jargon
    File:

      wart: n. A small, crocky
                    feature
                     that sticks out of an array (C
      has no checks for this). This is relatively benign and easy to
      spot if the phrase is bent so as to be not worth paying attention

to the medium in question.

Here is a short example of letter-based Dissociated Press applied
to the same source:

window sysIWYG: n. A bit was named aften /bee't*/ prefer to use
the other guy's re, especially in every cast a chuckle on
neithout getting into useful informash speech makes removing a
featuring a move or usage actual abstractionsidered
interj. Indeed spectace logic or problem!

A hackish idle pastime is to apply letter-based Dissociated Press
to a random body of text and
              vgrep
               the output in hopes of finding
an interesting new word. (In the preceding example, 'window
sysIWYG' and 'informash' show some promise.) Iterated applications
of Dissociated Press usually yield better results. Similar
techniques called 'travesty generators' have been employed with
considerable satirical effect to the utterances of Usenet flamers;
see
              pseudo
              .

distribution n. 1. A software source tree packaged for
   distribution; but see
              kit
              . 2. A vague term encompassing
   mailing lists and Usenet newsgroups (but not
              BBS

              fora
              );
   any topic-oriented message channel with multiple recipients. 3. An
   information-space domain (usually loosely correlated with
   geography) to which propagation of a Usenet message is restricted;
   a much-underutilized feature.

disusered adj. [Usenet] Said of a person whose account on a
   computer has been removed, esp. for cause rather than through
   normal attrition. "He got disusered when they found out he'd been
   cracking through the school's Internet access." The verbal form
   'disuser' is live but less common. Both usages probably derive
   from the DISUSER account status flag on VMS; setting it disables
   the account. Compare
              star out
              .

do protocol vi. [from network protocol programming] To
   perform an interaction with somebody or something that follows a
   clearly defined procedure. For example, "Let's do protocol with
   the check" at a restaurant means to ask for the check, calculate
   the tip and everybody's share, collect money from everybody,
   generate change as necessary, and pay the bill. See
              protocol
              .

doc /dok/ n. Common spoken and written shorthand for
   'documentation'. Often used in the plural 'docs' and in the
   construction 'doc file' (i.e., documentation available on-line).

doco /do'koh/ n. [orig. in-house jargon at Symbolics] A
   documentation writer. See also
                devo
                 and
                mango
                .

documentation n. The multiple kilograms of macerated,
   pounded, steamed, bleached, and pressed trees that accompany most
   modern software or hardware products (see also
                tree-killer
).
   Hackers seldom read paper documentation and (too) often resist
   writing it; they prefer theirs to be terse and on-line. A common
   comment on this predilection is "You can't
                grep
                 dead trees".
   See
                drool-proof paper
                ,
                verbiage
                ,
                treeware
                .

dodgy adj. Syn. with
                flaky
                . Preferred outside the
   U.S.

dogcow /dog'kow/ n. See
                Moof
                . The dogcow is a
   semi-legendary creature that lurks in the depths of the Macintosh
   Technical Notes Hypercard stack V3.1. The full story of the dogcow
   is told in technical note #31 (the particular Moof illustrated is
   properly named 'Clarus'). Option-shift-click will cause it to emit
   a characteristic 'Moof!' or '!fooM' sound. *Getting* to tech
   note 31 is the hard part; to discover how to do that, one must
   needs examine the stack script with a hackerly eye. Clue:
                rot13
                 is involved. A dogcow also appears if you choose 'Page
   Setup...' with a LaserWriter selected and click on the
   'Options' button.

dogpile v. [Usenet: prob. fr. mainstream "puppy pile"]
   When many people post unfriendly responses in short order to a
   single posting, they are sometimes said to "dogpile" or "dogpile
   on" the person to whom they're responding. For example, when a
   religious missionary posts a simplistic appeal to alt.atheism,
   he can expect to be dogpiled.

dogwash /dog'wosh/ [From a quip in the 'urgency' field
   of a very optional software change request, ca. 1982. It was
   something like "Urgency: Wash your dog first".] 1. n. A project
   of minimal priority, undertaken as an escape from more serious
   work. 2. v. To engage in such a project. Many games and much

               freeware
                get written this way.

domainist /doh-mayn'ist/ adj.,obs. 1. Said of an

               Internet address
                (as opposed to a
               bang path
) because the
   part to the right of the '@' specifies a nested series of
   'domains'; for example, esr@snark.thyrsus.com specifies
   the machine called snark in the subdomain called thyrsus
   within the top-level domain called com. See also

               big-endian
               , sense 2. 2. Said of a site, mailer, or routing
   program which knows how to handle domainist addresses. 3. Said of
   a person (esp. a site admin) who prefers domain addressing,
   supports a domainist mailer, or proselytizes for domainist
   addressing and disdains
               bang path
               s. This term is now (1996)
   obsolete, as effectively all sites have converted.

Don't do that, then! [from an old doctor's office joke
   about a patient with a trivial complaint] Stock response to a user
   complaint. "When I type control-S, the whole system comes to a
   halt for thirty seconds." "Don't do that, then!" (or "So don't
   do that!"). Compare
               RTFM
               .

dongle /dong'gl/ n. 1. A security or
               copy protection
                device for commercial microcomputer programs consisting of a
   serialized EPROM and some drivers in a D-25 connector shell, which
   must be connected to an I/O port of the computer while the program
   is run. Programs that use a dongle query the port at startup and
   at programmed intervals thereafter, and terminate if it does not
   respond with the dongle's programmed validation code. Thus, users
   can make as many copies of the program as they want but must pay
   for each dongle. The idea was clever, but it was initially a
   failure, as users disliked tying up a serial port this way. Almost
   all dongles on the market today (1993) will pass data through the
   port and monitor for
               magic
                codes (and combinations of status
   lines) with minimal if any interference with devices further down
   the line -- this innovation was necessary to allow daisy-chained
   dongles for multiple pieces of software. The devices are still not
   widely used, as the industry has moved away from copy-protection

schemes in general. 2. By extension, any physical electronic key
or transferable ID required for a program to function. Common
variations on this theme have used parallel or even joystick ports.
See
                dongle-disk
                .

[Note: in early 1992, advertising copy from Rainbow Technologies (a
manufacturer of dongles) included a claim that the word derived
from "Don Gall", allegedly the inventor of the device. The
company's receptionist will cheerfully tell you that the story is a
myth invented for the ad copy. Nevertheless, I expect it to haunt
my life as a lexicographer for at least the next ten years. ---
ESR]

dongle-disk /don'gl disk/ n. A special floppy disk that
is required in order to perform some task. Some contain special
coding that allows an application to identify it uniquely, others
are special code that does something that normally-resident
programs don't or can't. (For example, AT&T's "Unix PC" would
only come up in
                root mode
                 with a special boot disk.) Also
called a 'key disk'. See
                dongle
                .

donuts n.obs. A collective noun for any set of memory bits.
This usage is extremely archaic and may no longer be live jargon;
it dates from the days of ferrite-
                core
                 memories in which each
bit was implemented by a doughnut-shaped magnetic flip-flop.

doorstop n. Used to describe equipment that is
non-functional and halfway expected to remain so, especially
obsolete equipment kept around for political reasons or ostensibly
as a backup. "When we get another Wyse-50 in here, that ADM 3
will turn into a doorstop." Compare
                boat anchor
                .

dot file [Unix] n. A file that is not visible by default to
normal directory-browsing tools (on Unix, files named with a
leading dot are, by convention, not normally presented in directory
listings). Many programs define one or more dot files in which
startup or configuration information may be optionally recorded; a
user can customize the program's behavior by creating the
appropriate file in the current or home directory. (Therefore, dot
files tend to
                creep
                 -- with every nontrivial application
program defining at least one, a user's home directory can be
filled with scores of dot files, of course without the user's
really being aware of it.) See also
                profile
                 (sense 1),

```
                    rc file
                    .
```

double bucky adj. Using both the CTRL and META keys. "The
    command to burn all LEDs is double bucky F."

    This term originated on the Stanford extended-ASCII keyboard, and
    was later taken up by users of the
                    space-cadet keyboard
                     at
    MIT. A typical MIT comment was that the Stanford
                    bucky bits
                     (control and meta shifting keys) were nice, but there weren't
    enough of them; you could type only 512 different characters on a
    Stanford keyboard. An obvious way to address this was simply to
    add more shifting keys, and this was eventually done; but a
    keyboard with that many shifting keys is hard on touch-typists, who
    don't like to move their hands away from the home position on the
    keyboard. It was half-seriously suggested that the extra shifting
    keys be implemented as pedals; typing on such a keyboard would be
    very much like playing a full pipe organ. This idea is mentioned
    in a parody of a very fine song by Jeffrey Moss called
    "Rubber Duckie", which was published in "The Sesame
    Street Songbook" (Simon and Schuster 1971, ISBN 0-671-21036-X).
    These lyrics were written on May 27, 1978, in celebration of the
    Stanford keyboard:

            Double Bucky

        Double bucky, you're the one!
        You make my keyboard lots of fun.
            Double bucky, an additional bit or two:
        (Vo-vo-de-o!)
        Control and meta, side by side,
        Augmented ASCII, nine bits wide!
            Double bucky! Half a thousand glyphs, plus a few!
          Oh,
          I sure wish that I
          Had a couple of
              Bits more!
          Perhaps a
          Set of pedals to
          Make the number of
              Bits four:
          Double double bucky!
        Double bucky, left and right
        OR'd together, outta sight!
            Double bucky, I'd like a whole word of
            Double bucky, I'm happy I heard of
            Double bucky, I'd like a whole word of you!

        --- The Great Quux (with apologies to Jeffrey Moss)

    [This, by the way, is an excellent example of computer
                    filk
                        -- ESR] See also
                    meta bit

,
cokebottle
, and
quadruple bucky
.

double DECkers n. Used to describe married couples in which
   both partners work for Digital Equipment Corporation.

doubled sig [Usenet] n. A
                  sig block
                   that has been
   included twice in a
                  Usenet
                   article or, less commonly, in an
   electronic mail message. An article or message with a doubled sig
   can be caused by improperly configured software. More often,
   however, it reveals the author's lack of experience in electronic
   communication. See
                  B1FF
                  ,
                  pseudo
                  .

down 1. adj. Not operating. "The up escalator is down"
   is considered a humorous thing to say, and "The elevator is down"
   always means "The elevator isn't working" and never refers to
   what floor the elevator is on. With respect to computers, this
   term has passed into the mainstream; the extension to other kinds
   of machine is still hackish. 2. 'go down' vi. To stop
   functioning; usually said of the
                  system
                  . The message from the

                  console
                   that every hacker hates to hear from the operator is
   "System going down in 5 minutes". 3. 'take down', 'bring
   down' vt. To deactivate purposely, usually for repair work or

                  PM
                  . "I'm taking the system down to work on that bug in the
   tape drive." Occasionally one hears the word 'down' by itself
   used as a verb in this vt. sense. See
                  crash
                  ; oppose
                  up
                  .

download vt. To transfer data or (esp.) code from a
   larger 'host' system (esp. a
                  mainframe
) over a digital
   comm link to a smaller 'client' system, esp. a microcomputer
   or specialized peripheral. Oppose
                  upload
                  .

However, note that ground-to-space communications has its own usage
rule for this term. Space-to-earth transmission is always 'down'
and the reverse 'up' regardless of the relative size of the
computers involved. So far the in-space machines have invariably
been smaller; thus the upload/download distinction has been
reversed from its usual sense.

DP /D-P/ n. 1. Data Processing. Listed here because,
according to hackers, use of the term marks one immediately as a

              suit
              . See
              DPer
              . 2. Common abbrev for
              Dissociated Press
              .

DPB /d*-pib'/ vt. [from the PDP-10 instruction set] To
plop something down in the middle. Usage: silly. "DPB yourself
into that couch there." The connotation would be that the couch
is full except for one slot just big enough for one last person to
sit in. DPB means 'DePosit Byte', and was the name of a PDP-10
instruction that inserts some bits into the middle of some other
bits. Hackish usage has been kept alive by the Common LISP
function of the same name.

DPer /dee-pee-er/ n. Data Processor. Hackers are
absolutely amazed that
              suit
              s use this term self-referentially.
Computers process data, not people! See
              DP
              .

dragon n.   [MIT] A program similar to a
              daemon
              , except
that it is not invoked at all, but is instead used by the system to
perform various secondary tasks. A typical example would be an
accounting program, which keeps track of who is logged in,
accumulates load-average statistics, etc. Under ITS, many
terminals displayed a list of people logged in, where they were,
what they were running, etc., along with some random picture (such
as a unicorn, Snoopy, or the Enterprise), which was generated by
the 'name dragon'. Usage: rare outside MIT -- under Unix and most
other OSes this would be called a 'background demon' or

              daemon
              . The best-known Unix example of a dragon is
'cron(1)'. At SAIL, they called this sort of thing a
'phantom'.

Dragon Book n. The classic text "Compilers:
Principles, Techniques and Tools", by Alfred V. Aho, Ravi Sethi,
and Jeffrey D. Ullman (Addison-Wesley 1986; ISBN 0-201-10088-6),
so called because of the cover design featuring a dragon labeled
'complexity of compiler design' and a knight bearing the lance

'LALR parser generator' among his other trappings. This one is
more specifically known as the 'Red Dragon Book' (1986); an earlier
edition, sans Sethi and titled "Principles Of Compiler Design"
(Alfred V. Aho and Jeffrey D. Ullman; Addison-Wesley, 1977; ISBN
0-201-00022-9), was the 'Green Dragon Book' (1977). (Also 'New
Dragon Book', 'Old Dragon Book'.) The horsed knight and the
Green Dragon were warily eying each other at a distance; now the
knight is typing (wearing gauntlets!) at a terminal showing a
video-game representation of the Red Dragon's head while the rest
of the beast extends back in normal space. See also
                book titles
                .

drain v. [IBM] Syn. for
                flush
                 (sense 2). Has a
   connotation of finality about it; one speaks of draining a device
   before taking it offline.

dread high-bit disease n. A condition endemic to PRIME
   (a.k.a. PR1ME) minicomputers that results in all the characters
   having their high (0x80) bit ON rather than OFF. This of course
   makes transporting files to other systems much more difficult, not
   to mention talking to true 8-bit devices. Folklore had it that
   PRIME adopted the reversed-8-bit convention in order to save 25
   cents per serial line per machine; PRIME old-timers, on the other
   hand, claim they inherited the disease from Honeywell via customer
   NASA's compatibility requirements and struggled heroically to cure
   it. Whoever was responsible, this probably qualifies as one of the
   most
                cretinous
                 design tradeoffs ever made. See
                meta bit
                .
   A few other machines have exhibited similar brain damage.

DRECNET /drek'net/ n. [from Yiddish/German 'dreck',
   meaning filth] Deliberate distortion of DECNET, a networking
   protocol used in the
                VMS
                 community. So called because DEC
   helped write the Ethernet specification and then (either stupidly
   or as a malignant customer-control tactic) violated that spec in
   the design of DRECNET in a way that made it incompatible. See also

                connector conspiracy
                .

driver n. 1. The
                main loop
                 of an event-processing
   program; the code that gets commands and dispatches them for
   execution. 2. [techspeak] In 'device driver', code designed to
   handle a particular peripheral device such as a magnetic disk or
   tape unit. 3. In the TeX world and the computerized typesetting
   world in general, a program that translates some device-independent
   or other common format to something a real device can actually

understand.

droid n.   [from 'android', SF terminology for a humanoid
   robot of essentially biological (as opposed to
   mechanical/electronic) construction] A person (esp. a
   low-level bureaucrat or service-business employee) exhibiting most
   of the following characteristics: (a) naive trust in the wisdom of
   the parent organization or 'the system'; (b) a blind-faith
   propensity to believe obvious nonsense emitted by authority figures
   (or computers!); (c) a rule-governed mentality, one unwilling or
   unable to look beyond the 'letter of the law' in exceptional
   situations; (d) a paralyzing fear of official reprimand or worse if
   Procedures are not followed No Matter What; and (e) no interest in
   doing anything above or beyond the call of a very
   narrowly-interpreted duty, or in particular in fixing that which is
   broken; an "It's not my job, man" attitude.

   Typical droid positions include supermarket checkout assistant and
   bank clerk; the syndrome is also endemic in low-level government
   employees. The implication is that the rules and official
   procedures constitute software that the droid is executing;
   problems arise when the software has not been properly debugged.
   The term 'droid mentality' is also used to describe the mindset
   behind this behavior. Compare
                suit
                ,
                marketroid
                ; see

                -oid
                .

drool-proof paper n. Documentation that has been
   obsessively
                dumbed down
                , to the point where only a
                cretin
                  could bear to read it, is said to have succumbed to the
   'drool-proof paper syndrome' or to have been 'written on
   drool-proof paper'. For example, this is an actual quote from
   Apple's LaserWriter manual: "Do not expose your LaserWriter to
   open fire or flame."

drop on the floor vt. To react to an error condition by
   silently discarding messages or other valuable data. "The gateway
   ran out of memory, so it just started dropping packets on the
   floor." Also frequently used of faulty mail and netnews relay
   sites that lose messages. See also
                black hole
                ,
                bit bucket
                .

drop-ins n. [prob. by analogy with
                drop-outs
                ]
   Spurious characters appearing on a terminal or console as a result

of line noise or a system malfunction of some sort. Esp. used
when these are interspersed with one's own typed input. Compare

          drop-outs
          , sense 2.

drop-outs n. 1. A variety of 'power glitch' (see

          glitch
          ); momentary 0 voltage on the electrical mains.
2. Missing characters in typed input due to software malfunction or
system saturation (one cause of such behavior under Unix when a bad
connection to a modem swamps the processor with spurious character
interrupts; see
          screaming tty
). 3. Mental glitches; used as a
way of describing those occasions when the mind just seems to shut
down for a couple of beats. See
          glitch
          ,
          fried
          .

drugged adj. (also 'on drugs') 1. Conspicuously stupid,
heading toward
          brain-damaged
          . Often accompanied by a
pantomime of toking a joint. 2. Of hardware, very slow relative to
normal performance.

drum adj, n. Ancient techspeak term referring to slow,
cylindrical magnetic media that were once state-of-the-art storage
devices. Under BSD Unix the disk partition used for swapping is
still called '/dev/drum'; this has led to considerable humor
and not a few straight-faced but utterly bogus 'explanations'
getting foisted on
          newbie
          s. See also
"
          The Story of Mel, a Real Programmer
          " in Appendix A.

drunk mouse syndrome n. (also 'mouse on drugs') A malady
exhibited by the mouse pointing device of some computers. The
typical symptom is for the mouse cursor on the screen to move in
random directions and not in sync with the motion of the actual
mouse. Can usually be corrected by unplugging the mouse and
plugging it back again. Another recommended fix for optical mice
is to rotate your mouse pad 90 degrees.

At Xerox PARC in the 1970s, most people kept a can of copier
cleaner (isopropyl alcohol) at their desks. When the steel ball on
the mouse had picked up enough
          cruft
           to be unreliable, the
mouse was doused in cleaner, which restored it for a while.
However, this operation left a fine residue that accelerated the

accumulation of cruft, so the dousings became more and more
frequent. Finally, the mouse was declared 'alcoholic' and sent
to the clinic to be dried out in a CFC ultrasonic bath.

Duff's device n. The most dramatic use yet seen of
                fall through
                  in C, invented by Tom Duff when he was at Lucasfilm.
   Trying to
                bum
                 all the instructions he could out of an inner
   loop that copied data serially onto an output port, he decided to
   unroll it. He then realized that the unrolled version could be
   implemented by *interlacing* the structures of a switch and a
   loop:

```
        register n = (count + 7) / 8;       /* count > 0 assumed */

        switch (count % 8)
        {
        case 0:         do {  *to = *from++;
        case 7:               *to = *from++;
        case 6:               *to = *from++;
        case 5:               *to = *from++;
        case 4:               *to = *from++;
        case 3:               *to = *from++;
        case 2:               *to = *from++;
        case 1:               *to = *from++;
                        } while (--n > 0);
        }
```

   Shocking though it appears to all who encounter it for the first
   time, the device is actually perfectly valid, legal C. C's default

                fall through
                 in case statements has long been its most
   controversial single feature; Duff observed that "This code forms
   some sort of argument in that debate, but I'm not sure whether it's
   for or against."

   [For maximal obscurity, the outermost pair of braces above could be
   actually be removed -- GLS]

dumb terminal n. A terminal that is one step above a

                glass tty
                , having a minimally addressable cursor but no
   on-screen editing or other features normally supported by a

                smart terminal
                . Once upon a time, when glass ttys were common
   and addressable cursors were something special, what is now called
   a dumb terminal could pass for a smart terminal.

dumbass attack /duhm'as *-tak'/ n. [Purdue] Notional
   cause of a novice's mistake made by the experienced, especially one
   made while running as
                root

```
                      under Unix, e.g., typing 'rm
   -r *' or 'mkfs' on a mounted file system.  Compare
                      adger
                      .
```

dumbed down adj. Simplified, with a strong connotation of
   *over*simplified. Often, a
                      marketroid
                       will insist that
   the interfaces and documentation of software be dumbed down after
   the designer has burned untold gallons of midnight oil making it
   smart. This creates friction. See
                      user-friendly
                      .

dump n. 1. An undigested and voluminous mass of information
   about a problem or the state of a system, especially one routed to
   the slowest available output device (compare
                      core dump
                      ), and
   most especially one consisting of hex or octal
                      runes
                         describing the byte-by-byte state of memory, mass storage, or ←
                          some
   file. In
                      elder days
                      , debugging was generally done by
   'groveling over' a dump (see
                      grovel
                      ); increasing use of
   high-level languages and interactive debuggers has made such tedium
   uncommon, and the term 'dump' now has a faintly archaic flavor.
   2. A backup. This usage is typical only at large timesharing
   installations.

dumpster diving /dump'-ster di:'-ving/ n. 1. The practice
   of sifting refuse from an office or technical installation to
   extract confidential data, especially security-compromising
   information ('dumpster' is an Americanism for what is elsewhere
   called a 'skip'). Back in AT&T's monopoly days, before paper
   shredders became common office equipment, phone phreaks (see

                      phreaking
) used to organize regular dumpster runs against
   phone company plants and offices. Discarded and damaged copies of
   AT&T internal manuals taught them much. The technique is still
   rumored to be a favorite of crackers operating against careless
   targets. 2. The practice of raiding the dumpsters behind buildings
   where producers and/or consumers of high-tech equipment are
   located, with the expectation (usually justified) of finding
   discarded but still-valuable equipment to be nursed back to health
   in some hacker's den. Experienced dumpster-divers not infrequently
   accumulate basements full of moldering (but still potentially
   useful)
                      cruft
                      .

dup killer /d[y]oop kill'r/ n. [FidoNet] Software that is
   supposed to detect and delete duplicates of a message that may have
   reached the FidoNet system via different routes.

dup loop /d[y]oop loop/ (also 'dupe loop') n. [FidoNet]
   An infinite stream of duplicated, near-identical messages on a
   FidoNet
                echo
                , the only difference being unique or mangled
   identification information applied by a faulty or incorrectly
   configured system or network gateway, thus rendering
                dup killer
                s
   ineffective. If such a duplicate message eventually
   reaches a system through which it has already passed (with the
   original identification information), all systems passed on the way
   back to that system are said to be involved in a
                dup loop
                .

dusty deck n. Old software (especially applications) which
   one is obliged to remain compatible with, or to maintain (
                DP
                   types call this 'legacy code', a term hackers consider smarmy ←
                     and
   excessively reverent). The term implies that the software in
   question is a holdover from card-punch days. Used esp. when
   referring to old scientific and
                number-crunching
                 software,
   much of which was written in FORTRAN and very poorly documented but
   is believed to be too expensive to replace. See
                fossil
                ;
   compare
                crawling horror
                .

DWIM /dwim/ [acronym, 'Do What I Mean'] 1. adj. Able to
   guess, sometimes even correctly, the result intended when bogus
   input was provided. 2. n.,obs. The BBNLISP/INTERLISP function that
   attempted to accomplish this feat by correcting many of the more
   common errors. See
                hairy
                . 3. Occasionally, an interjection
   hurled at a balky computer, esp. when one senses one might be
   tripping over legalisms (see
                legalese
).

   Warren Teitelman originally wrote DWIM to fix his typos and
   spelling errors, so it was somewhat idiosyncratic to his style, and
   would often make hash of anyone else's typos if they were
   stylistically different. Some victims of DWIM thus claimed that
   the acronym stood for 'Damn Warren's Infernal Machine!'.

   In one notorious incident, Warren added a DWIM feature to the

command interpreter used at Xerox PARC. One day another hacker
there typed 'delete *$' to free up some disk space. (The
editor there named backup files by appending '$' to the
original file name, so he was trying to delete any backup files
left over from old editing sessions.) It happened that there
weren't any editor backup files, so DWIM helpfully reported
'*$ not found, assuming you meant 'delete *'.' It then started
to delete all the files on the disk! The hacker managed to stop it
with a

                Vulcan nerve pinch
                after only a half dozen or so files
were lost.

The disgruntled victim later said he had been sorely tempted to go
to Warren's office, tie Warren down in his chair in front of his
workstation, and then type 'delete *$' twice.

DWIM is often suggested in jest as a desired feature for a complex
program; it is also occasionally described as the single
instruction the ideal computer would have. Back when proofs of
program correctness were in vogue, there were also jokes about
'DWIMC' (Do What I Mean, Correctly). A related term, more often
seen as a verb, is DTRT (Do The Right Thing); see

                Right Thing
                .

dynner /din'r/ 32 bits, by analogy with
                nybble
                and

                byte
                . Usage: rare and extremely silly. See also
                playte
                ,

                tayste
                ,
                crumb
                . General discussion of such terms is under

                nybble
                .

1.10   E

                earthquake n.   [IBM] The ultimate real-world shock test for
computer hardware. Hackish sources at IBM deny the rumor that the
Bay Area quake of 1989 was initiated by the company to test
quality-assurance procedures at its California plants.

Easter egg n.   [from the custom of the Easter Egg hunt
    observed in the U.S. and many parts of Europe] 1. A message hidden
    in the object code of a program as a joke, intended to be found by
    persons disassembling or browsing the code. 2. A message, graphic,

   or sound effect emitted by a program (or, on a PC, the BIOS ROM) in
   response to some undocumented set of commands or keystrokes,
   intended as a joke or to display program credits. One well-known
   early Easter egg found in a couple of OSes caused them to respond
   to the command 'make love' with 'not war?'. Many
   personal computers have much more elaborate eggs hidden in ROM,
   including lists of the developers' names, political exhortations,
   snatches of music, and (in one case) graphics images of the entire
   development team.

Easter egging n. [IBM] The act of replacing unrelated
   components more or less at random in hopes that a malfunction will
   go away. Hackers consider this the normal operating mode of

                field circus
                 techs and do not love them for it. See also the
   jokes under
                field circus
                . Compare
                shotgun debugging
                .

eat flaming death imp. A construction popularized among
   hackers by the infamous
                CPU Wars
                 comic; supposedly derive from
   a famously turgid line in a WWII-era anti-Nazi propaganda comic
   that ran "Eat flaming death, non-Aryan mongrels!" or something
   of the sort (however, it is also reported that the Firesign
   Theater's 1975 album "In The Next World, You're On Your Own"
   included the phrase "Eat flaming death, fascist media pigs"; this
   may have been an influence). Used in humorously overblown
   expressions of hostility. "Eat flaming death,
                EBCDIC
                 users!"

EBCDIC /eb's*-dik/, /eb'see'dik/, or /eb'k*-dik/ n.
   [abbreviation, Extended Binary Coded Decimal Interchange Code] An
   alleged character set used on IBM
                dinosaur
                s. It exists in at
   least six mutually incompatible versions, all featuring such
   delights as non-contiguous letter sequences and the absence of
   several ASCII punctuation characters fairly important for modern
   computer languages (exactly which characters are absent varies
   according to which version of EBCDIC you're looking at). IBM
   adapted EBCDIC from
                punched card
                 code in the early 1960s and
   promulgated it as a customer-control tactic (see

                connector conspiracy
                ), spurning the already established ASCII
   standard. Today, IBM claims to be an open-systems company, but IBM's
   own description of the EBCDIC variants and how to convert between them
   is still internally classified top-secret, burn-before-reading.
   Hackers blanch at the very *name* of EBCDIC and consider it a

    manifestation of purest
                evil
                . See also
                fear and loathing
                .

echo [FidoNet] n. A
                topic group
                 on
                FidoNet
                's
    echomail system. Compare
                newsgroup
                .

eighty-column mind n.   [IBM] The sort said to be possessed by
    persons for whom the transition from
                punched card
                 to tape was
    traumatic (nobody has dared tell them about disks yet). It is said
    that these people, including (according to an old joke) the founder
    of IBM, will be buried 'face down, 9-edge first' (the 9-edge being
    the bottom of the card). This directive is inscribed on IBM's 1402
    and 1622 card readers and is referenced in a famous bit of doggerel
    called "The Last Bug", the climactic lines of which are as
    follows:

        He died at the console
        Of hunger and thirst.
        Next day he was buried,
        Face down, 9-edge first.

    The eighty-column mind is thought by most hackers to dominate IBM's
    customer base and its thinking. See
                IBM
                ,
                fear and loathing
                ,
                card walloper
                .

El Camino Bignum /el' k*-mee'noh big'nuhm/ n. The road
    mundanely called El Camino Real, a road through the San Francisco
    peninsula that originally extended all the way down to Mexico City
    and many portions of which are still intact. Navigation on the San
    Francisco peninsula is usually done relative to El Camino Real,
    which defines
                logical
                 north and south even though it isn't
    really north-south in many places. El Camino Real runs right past
    Stanford University and so is familiar to hackers.

    The Spanish word 'real' (which has two syllables: /ray-ol'/)
    means 'royal'; El Camino Real is 'the royal road'. In the FORTRAN
    language, a 'real' quantity is a number typically precise to seven
    significant digits, and a 'double precision' quantity is a larger

floating-point number, precise to perhaps fourteen significant
digits (other languages have similar 'real' types).

When a hacker from MIT visited Stanford in 1976, he remarked what a
long road El Camino Real was. Making a pun on 'real', he started
calling it 'El Camino Double Precision' -- but when the hacker
was told that the road was hundreds of miles long, he renamed it
'El Camino Bignum', and that name has stuck. (See
            bignum
            .)
In recent years, the synonym 'El Camino Virtual' has been
reported as an alternate at IBM and Amdahl sites in the Valley.

[GLS has since let slip that the unnamed hacker in this story was
in fact him -- ESR]

elder days n. The heroic age of hackerdom (roughly,
   pre-1980); the era of the
            PDP-10
            ,
            TECO
            ,
            ITS
            , and the
   ARPANET. This term has been rather consciously adopted from
   J. R. R. Tolkien's fantasy epic "The Lord of the Rings".
   Compare
            Iron Age
            ; see also
            elvish
             and
            Great Worm, the
            .

elegant adj. [from mathematical usage] Combining
   simplicity, power, and a certain ineffable grace of design. Higher
   praise than 'clever', 'winning', or even
            cuspy
            .

The French aviator, adventurer, and author Antoine de
Saint-Exup'ery, probably best known for his classic children's
book "The Little Prince", was also an aircraft designer. He
gave us perhaps the best definition of engineering elegance when he
said "A designer knows he has achieved perfection not when there
is nothing left to add, but when there is nothing left to take
away."

elephantine adj. Used of programs or systems that are both
   conspicuous
            hog
            s (owing perhaps to poor design founded on

            brute force and ignorance
) and exceedingly
            hairy
             in

source form. An elephantine program may be functional and even
friendly, but (as in the old joke about being in bed with an
elephant) it's tough to have around all the same (and, like a
pachyderm, difficult to maintain). In extreme cases, hackers have
been known to make trumpeting sounds or perform expressive
proboscatory mime at the mention of the offending program. Usage:
semi-humorous. Compare 'has the elephant nature' and the
somewhat more pejorative
              monstrosity
              . See also

              second-system effect
               and
              baroque
              .

elevator controller n. An archetypal dumb embedded-systems
   application, like
              toaster
               (which superseded it). During one
   period (1983--84) in the deliberations of ANSI X3J11 (the C
   standardization committee) this was the canonical example of a
   really stupid, memory-limited computation environment. "You can't
   require 'printf(3)' to be part of the default runtime library
   -- what if you're targeting an elevator controller?" Elevator
   controllers became important rhetorical weapons on both sides of
   several
              holy wars
              .

elite adj. Clueful. Plugged-in. One of the cognoscenti.
   Also used as a general positive adjective. This term is not
   actually hacker slang in the strict sense; it is used primarily by
   crackers and
              warez d00dz
              . Cracker usage is probaby related to
   a 19200cps modem called the 'Courier Elite' that was widely popular
   on pirate boards before the V.32bis standard. A true hacker would
   be more likely to use 'wizardly'. Oppose
              lamer
              .

ELIZA effect /*-li:'z* *-fekt'/ n. [AI community] The
   tendency of humans to attach associations to terms from prior
   experience. For example, there is nothing magic about the symbol
   '+' that makes it well-suited to indicate addition; it's just
   that people associate it with addition. Using '+' or 'plus'
   to mean addition in a computer language is taking advantage of the
   ELIZA effect.

   This term comes from the famous ELIZA program by Joseph Weizenbaum,
   which simulated a Rogerian psychotherapist by rephrasing many of
   the patient's statements as questions and posing them to the
   patient. It worked by simple pattern recognition and substitution
   of key words into canned phrases. It was so convincing, however,
   that there are many anecdotes about people becoming very
   emotionally caught up in dealing with ELIZA. All this was due to

people's tendency to attach to words meanings which the computer
never put there. The ELIZA effect is a
                Good Thing
                 when
writing a programming language, but it can blind you to serious
shortcomings when analyzing an Artificial Intelligence system.
Compare
                ad-hockery
                ; see also
                AI-complete
                .

elvish n. 1. The Tengwar of Feanor, a table of letterforms
    resembling the beautiful Celtic half-uncial hand of the "Book
    of Kells". Invented and described by J. R. R. Tolkien in "The
    Lord of The Rings" as an orthography for his fictional 'elvish'
    languages, this system (which is both visually and phonetically

                elegant
) has long fascinated hackers (who tend to be intrigued
    by artificial languages in general). It is traditional for
    graphics printers, plotters, window systems, and the like to
    support a Feanorian typeface as one of their demo items. See also

                elder days
                . 2. By extension, any odd or unreadable typeface
    produced by a graphics device. 3. The typeface mundanely called
    'B"ocklin', an art-decoish display font.

EMACS /ee'maks/ n. [from Editing MACroS] The ne plus
    ultra of hacker editors, a programmable text editor with an entire
    LISP system inside it. It was originally written by Richard
    Stallman in
                TECO
                 under
                ITS
                 at the MIT AI lab; AI Memo 554
    described it as "an advanced, self-documenting, customizable,
    extensible real-time display editor". It has since been
    reimplemented any number of times, by various hackers, and versions
    exist that run under most major operating systems. Perhaps the
    most widely used version, also written by Stallman and now called
    "
                GNU
                 EMACS" or
                GNUMACS
                , runs principally under Unix.
    It includes facilities to run compilation subprocesses and send and
    receive mail; many hackers spend up to 80% of their
                tube time
                  inside it. Other variants include
                GOSMACS
                , CCA EMACS,
    UniPress EMACS, Montgomery EMACS, jove, epsilon, and MicroEMACS.

    Some EMACS versions running under window managers iconify as an
    overflowing kitchen sink, perhaps to suggest the one feature the

    editor does not (yet) include. Indeed, some hackers find EMACS too

                heavyweight
                 and
                baroque
                 for their taste, and expand the
    name as 'Escape Meta Alt Control Shift' to spoof its heavy reliance
    on keystrokes decorated with
                bucky bits
                . Other spoof
    expansions include 'Eight Megabytes And Constantly Swapping',
    'Eventually 'malloc()'s All Computer Storage', and 'EMACS
    Makes A Computer Slow' (see
                recursive acronym
). See
    also
                vi
                .

email /ee'mayl/ (also written 'e-mail' and 'E'-mail')
    1. n. Electronic mail automatically passed through computer
    networks and/or via modems over common-carrier lines. Contrast

                snail-mail
                ,
                paper-net
                ,
                voice-net
                . See
                network address
                .
    2. vt. To send electronic mail.

    Oddly enough, the word 'emailed' is actually listed in the OED;
    it means "embossed (with a raised pattern) or perh. arranged in a
    net or open work". A use from 1480 is given. The word is derived
    from Old French 'emmaill"ure', network. A French correspondent
    tells us that in modern French, 'email' is a hard enamel obtained
    by heating special paints in a furnace; an 'emailleur' (no final e)
    is a craftsman who makes email (he generally paints some objects
    like jewels and cook them in a furnace).

    There are numerous spelling variants of this word. By statistical
    analysis of a large volume of Internet traffic, 'email'
    predominates, 'e-mail' runs a not-too-distant second, and
    'E-mail' and 'Email' a distant third and fourth.

emoticon /ee-moh'ti-kon/ n. An ASCII glyph used to
    indicate an emotional state in email or news. Although originally
    intended mostly as jokes, emoticons (or some other explicit humor
    indication) are virtually required under certain circumstances in
    high-volume text-only communication forums such as Usenet; the lack
    of verbal and visual cues can otherwise cause what were intended to
    be humorous, sarcastic, ironic, or otherwise non-100%-serious
    comments to be badly misinterpreted (not always even by

                newbie

               s), resulting in arguments and
               flame war
               s.

Hundreds of emoticons have been proposed, but only a few are in
common use. These include:

  :-)
     'smiley face' (for humor, laughter, friendliness,
     occasionally sarcasm)

  :-(
     'frowney face' (for sadness, anger, or upset)

  ;-)
     'half-smiley' (
        ha ha only serious
        ); also known as
     'semi-smiley' or 'winkey face'.

  :-/
     'wry face'

(These may become more comprehensible if you tilt your head
sideways, to the left.)

The first two listed are by far the most frequently encountered.
Hyphenless forms of them are common on CompuServe, GEnie, and BIX;
see also
        bixie
        . On
        Usenet
        , 'smiley' is often used as a
generic term synonymous with
        emoticon
        , as well as specifically
for the happy-face emoticon.

It appears that the emoticon was invented by one Scott Fahlman on
the CMU
        bboard
        systems around 1980. He later wrote: "I wish I
had saved the original post, or at least recorded the date for
posterity, but I had no idea that I was starting something that
would soon pollute all the world's communication channels." [GLS
confirms that he remembers this original posting].

Note for the
        newbie
        : Overuse of the smiley is a mark of
loserhood! More than one per paragraph is a fairly sure sign that
you've gone over the line.

empire n. Any of a family of military simulations derived
   from a game written by Peter Langston many years ago. Five or six
   multi-player variants of varying degrees of sophistication exist,
   and one single-player version implemented for both Unix and VMS;

the latter is even available as MS-DOS freeware. All are
notoriously addictive.

engine n. 1. A piece of hardware that encapsulates some
   function but can't be used without some kind of
                front end
                .
   Today we have, especially, 'print engine': the guts of a laser
   printer. 2. An analogous piece of software; notionally, one that
   does a lot of noisy crunching, such as a 'database engine'.

   The hackish senses of 'engine' are actually close to its original,
   pre-Industrial-Revolution sense of a skill, clever device, or
   instrument (the word is cognate to 'ingenuity'). This sense had
   not been completely eclipsed by the modern connotation of
   power-transducing machinery in Charles Babbage's time, which
   explains why he named the stored-program computer that
   he designed in 1844 the 'Analytical Engine'.

English 1. n.,obs. The source code for a program, which may
   be in any language, as opposed to the linkable or executable binary
   produced from it by a compiler. The idea behind the term is that
   to a real hacker, a program written in his favorite programming
   language is at least as readable as English. Usage: mostly by
   old-time hackers, though recognizable in context. 2. The official
   name of the database language used by the Pick Operating System,
   actually a sort of crufty, brain-damaged SQL with delusions of
   grandeur. The name permits
                marketroid
                s to say "Yes, and you
   can program our computers in English!" to ignorant
                suit
                s
   without quite running afoul of the truth-in-advertising laws.

enhancement n. Common
                marketroid
                -speak for a bug

                fix
                . This abuse of language is a popular and time-tested way
   to turn incompetence into increased revenue. A hacker being ironic
   would instead call the fix a
                feature
                -- or perhaps save some
   effort by declaring the bug itself to be a feature.

ENQ /enkw/ or /enk/ [from the ASCII mnemonic ENQuire
   for 0000101] An on-line convention for querying someone's
   availability. After opening a
                talk mode
                connection to someone
   apparently in heavy hack mode, one might type 'SYN SYN ENQ?'
   (the SYNs representing notional synchronization bytes), and expect
   a return of
                ACK
                or

                    NAK
                     depending on whether or not the
    person felt interruptible. Compare
                    ping
                    ,
                    finger
                    , and the
    usage of 'FOO?' listed under
                    talk mode
                    .

EOF /E-O-F/ n. [abbreviation, 'End Of File']
    1. [techspeak] The
                    out-of-band
                     value returned by C's
    sequential character-input functions (and their equivalents in
    other environments) when end of file has been reached. This value
    is -1 under C libraries postdating V6 Unix, but was
    originally 0. 2. [Unix] The keyboard character (usually control-D,
    the ASCII EOT (End Of Transmission) character) that is mapped by
    the terminal driver into an end-of-file condition. 3. Used by
    extension in non-computer contexts when a human is doing something
    that can be modeled as a sequential read and can't go further.
    "Yeah, I looked for a list of 360 mnemonics to post as a joke, but
    I hit EOF pretty fast; all the library had was a
                    JCL
                     manual."
    See also
                    EOL
                    .

EOL /E-O-L/ n. [End Of Line] Syn. for
                    newline
                    ,
    derived perhaps from the original CDC6600 Pascal. Now rare, but
    widely recognized and occasionally used for brevity. Used in the
    example entry under
                    BNF
                    . See also
                    EOF
                    .

EOU /E-O-U/ n. The mnemonic of a mythical ASCII control
    character (End Of User) that would make an ASR-33 Teletype explode
    on receipt. This construction parodies the numerous obscure
    delimiter and control characters left in ASCII from the days when
    it was associated more with wire-service teletypes than computers
    (e.g., FS, GS, RS, US, EM, SUB, ETX, and esp. EOT). It is worth
    remembering that ASR-33s were big, noisy mechanical beasts with a
    lot of clattering parts; the notion that one might explode was
    nowhere near as ridiculous as it might seem to someone sitting in
    front of a
                    tube
                     or flatscreen today.

epoch n. [Unix: prob. from astronomical timekeeping] The
    time and date corresponding to 0 in an operating system's clock and

timestamp values. Under most Unix versions the epoch is 00:00:00
GMT, January 1, 1970; under VMS, it's 00:00:00 of November 17, 1858
(base date of the U.S. Naval Observatory's ephemerides); on a
Macintosh, it's the midnight beginning January 1 1904. System time
is measured in seconds or
                tick
                s past the epoch. Weird
problems may ensue when the clock wraps around (see
                wrap around
                ),
which is not necessarily a rare event; on systems
counting 10 ticks per second, a signed 32-bit count of ticks is
good only for 6.8 years. The 1-tick-per-second clock of Unix is
good only until January 18, 2038, assuming at least some software
continues to consider it signed and that word lengths don't
increase by then. See also
                wall time
                .

epsilon   [see
                delta
                ] 1. n. A small quantity of
anything. "The cost is epsilon." 2. adj. Very small,
negligible; less than
                marginal
                . "We can get this feature for
epsilon cost." 3. 'within epsilon of': close enough to be
indistinguishable for all practical purposes, even closer than
being 'within delta of'. "That's not what I asked for, but it's
within epsilon of what I wanted." Alternatively, it may mean not
close enough, but very little is required to get it there: "My
program is within epsilon of working."

epsilon squared n. A quantity even smaller than

                epsilon
                , as small in comparison to epsilon as epsilon is to
something normal; completely negligible. If you buy a
supercomputer for a million dollars, the cost of the
thousand-dollar terminal to go with it is
                epsilon
                , and the
cost of the ten-dollar cable to connect them is epsilon squared.
Compare
                lost in the underflow
                ,
                lost in the noise
                .

era, the Syn.
                epoch
                . Webster's Unabridged makes these
words almost synonymous, but 'era' more often connotes a span of
time rather than a point in time, whereas the reverse is true for

                epoch
                . The

```
                epoch
                 usage is recommended.
```

Eric Conspiracy n. A shadowy group of mustachioed hackers
    named Eric first pinpointed as a sinister conspiracy by an infamous
    talk.bizarre posting ca. 1986; this was doubtless influenced by
    the numerous 'Eric' jokes in the Monty Python oeuvre. There do
    indeed seem to be considerably more mustachioed Erics in hackerdom
    than the frequency of these three traits can account for unless
    they are correlated in some arcane way. Well-known examples
    include Eric Allman (he of the 'Allman style' described under

```
                indent style
                ) and Erik Fair (co-author of NNTP); your editor
```
    has heard from about fifteen others by email, and the organization
    line 'Eric Conspiracy Secret Laboratories' now emanates regularly
    from more than one site.

Eris /e'ris/ n. The Greek goddess of Chaos, Discord,
    Confusion, and Things You Know Not Of; her name was latinized to
    Discordia and she was worshiped by that name in Rome. Not a very
    friendly deity in the Classical original, she was reinvented as a
    more benign personification of creative anarchy starting in 1959 by
    the adherents of
```
                Discordianism
                 and has since been a
```
    semi-serious subject of veneration in several 'fringe' cultures,
    including hackerdom. See
```
                Discordianism
                ,
                Church of the SubGenius
                .
```

erotics /ee-ro'tiks/ n. [Helsinki University of
    Technology, Finland] n. English-language university slang for
    electronics. Often used by hackers in Helsinki, maybe because good
    electronics excites them and makes them warm.

error 33 [XEROX PARC] n. 1. Predicating one research effort
    upon the success of another. 2. Allowing your own research effort
    to be placed on the critical path of some other project (be it a
    research effort or not).

evil adj. As used by hackers, implies that some system,
    program, person, or institution is sufficiently maldesigned as to
    be not worth the bother of dealing with. Unlike the adjectives in
    the
```
                cretinous
                /
                losing
                /
                brain-damaged
                 series, 'evil'
```
    does not imply incompetence or bad design, but rather a set of
    goals or design criteria fatally incompatible with the speaker's.
    This usage is more an esthetic and engineering judgment than a
    moral one in the mainstream sense. "We thought about adding a

                        Blue Glue
                         interface but decided it was too evil to deal
    with."   "
                        TECO
                         is neat, but it can be pretty evil if you're
    prone to typos." Often pronounced with the first syllable
    lengthened, as /eeee'vil/. Compare
                        evil and rude
                        .

evil and rude adj. Both
                        evil
                         and
                        rude
                        , but with
    the additional connotation that the rudeness was due to malice
    rather than incompetence. Thus, for example: Microsoft's Windows
    NT is evil because it's a competent implementation of a bad
    design; it's rude because it's gratuitously incompatible with
    Unix in places where compatibility would have been as easy and
    effective to do; but it's evil and rude because the
    incompatibilities are apparently there not to fix design bugs in
    Unix but rather to lock hapless customers and developers into the
    Microsoft way. Hackish evil and rude is close to the
    mainstream sense of 'evil'.

exa- /ek's*/ pref. [SI] See
                        quantifiers
                        .

examining the entrails n. The process of
                        grovel
                        ling
    through a
                        core dump
                         or hex image in an attempt to discover the
    bug that brought a program or system down. The reference is to
    divination from the entrails of a sacrified animal. Compare

                        runes
                        ,
                        incantation
                        ,
                        black art
                        ,
                        desk check
                        .

EXCH /eks'ch*/ or /eksch/ vt. To exchange two things,
    each for the other; to swap places. If you point to two people
    sitting down and say "Exch!", you are asking them to trade
    places. EXCH, meaning EXCHange, was originally the name of a
    PDP-10 instruction that exchanged the contents of a register and a
    memory location. Many newer hackers are probably thinking instead
    of the
                        PostScript

                                exchange operator (which is usually written
        in lowercase).

excl /eks'kl/ n. Abbreviation for 'exclamation point'.
        See
                                bang
                                ,
                                shriek
                                ,
                                ASCII
                                .

EXE /eks'ee/ or /eek'see/ or /E-X-E/ n. An executable
        binary file. Some operating systems (notably MS-DOS, VMS, and
        TWENEX) use the extension .EXE to mark such files. This usage is
        also occasionally found among Unix programmers even though Unix
        executables don't have any required suffix.

exec /eg-zek'/ or /eks'ek/ vt., n. 1. [Unix: from
        'execute'] Synonym for
                                chain
                                , derives from the
        'exec(2)' call. 2. [from 'executive'] obs. The command
        interpreter for an
                                OS
                                 (see
                                shell
                                ); term esp. used
        around mainframes, and prob. derived from UNIVAC's archaic EXEC 2
        and EXEC 8 operating systems. 3. At IBM and VM/CMS shops, the
        equivalent of a shell command file (among VM/CMS users).

        The mainstream 'exec' as an abbreviation for (human) executive is
        not used. To a hacker, an 'exec' is a always a program,
        never a person.

exercise, left as an [from technical books] Used to
        complete a proof when one doesn't mind a
                                handwave
                                , or to avoid
        one entirely. The complete phrase is: "The proof [or 'the rest']
        is left as an exercise for the reader." This comment *has*
        occasionally been attached to unsolved research problems by authors
        possessed of either an evil sense of humor or a vast faith in the
        capabilities of their audiences.

external memory n. A memo pad or written notes. "Hold on
        while I write that to external memory". The analogy is with store
        or DRAM versus nonvolatile disk storage on computers.

eye candy i:' kand'ee [from mainstream slang "ear candy"]
        A display of some sort that's presented to
                                luser
                                s
        to keep them distracted while the program performs necessary
        background tasks. "Give 'em some eye candy while the back-end

```
                    slurp
                    s that
                    BLOB
                     into core."
```

eyeball search n.,v. To look for something in a mass of
   code or data with one's own native optical sensors, as opposed to
   using some sort of pattern matching software like
```
                    grep
                     or any
```
   other automated search tool. Also called a
```
                    vgrep
                    ; compare

                    vdiff
                    ,
                    desk check
                    .
```

1.11 F

```
                    face time n.  Time spent interacting with somebody
```
   face-to-face (as opposed to via electronic links). "Oh, yeah, I
   spent some face time with him at the last Usenix."

factor n. See
```
                    coefficient of X
                    .
```

fall over vi. [IBM] Yet another synonym for
```
                    crash
                     or

                    lose
                    .  'Fall over hard' equates to
                    crash and burn
                    .
```

fall through v. (n. 'fallthrough', var.
   'fall-through') 1. To exit a loop by exhaustion, i.e., by having
   fulfilled its exit condition rather than via a break or exception
   condition that exits from the middle of it. This usage appears to
   be *really* old, dating from the 1940s and 1950s. 2. To fail
   a test that would have passed control to a subroutine or some other
   distant portion of code. 3. In C, 'fall-through' occurs when the
   flow of execution in a switch statement reaches a 'case' label
   other than by jumping there from the switch header, passing a point
   where one would normally expect to find a 'break'. A trivial
   example:

```
    switch (color)
    {
    case GREEN:
        do_green();
```

```
        break;
    case PINK:
        do_pink();
        /* FALL THROUGH */
    case RED:
        do_red();
        break;
    default:
        do_blue();
        break;
    }
```

The variant spelling '/* FALL THRU */' is also common.

The effect of the above code is to 'do_green()' when color is
'GREEN', 'do_red()' when color is 'RED',
'do_blue()' on any other color other than 'PINK', and
(and this is the important part) 'do_pink()' *and then*
'do_red()' when color is 'PINK'. Fall-through is

                considered harmful
                 by some, though there are contexts (such as
    the coding of state machines) in which it is natural; it is
    generally considered good practice to include a comment
    highlighting the fall-through where one would normally expect a
    break. See also
                Duff's device
                .

fan n. Without qualification, indicates a fan of science
    fiction, especially one who goes to
                con
                s and tends to hang out
    with other fans. Many hackers are fans, so this term has been
    imported from fannish slang; however, unlike much fannish slang it
    is recognized by most non-fannish hackers. Among SF fans the
    plural is correctly 'fen', but this usage is not automatic to
    hackers. "Laura reads the stuff occasionally but isn't really a
    fan."

fandango on core n. [Unix/C hackers, from the Mexican
    dance] In C, a wild pointer that runs out of bounds, causing a

                core dump
                , or corrupts the 'malloc(3)'
                arena
                 in such
    a way as to cause mysterious failures later on, is sometimes said
    to have 'done a fandango on core'. On low-end personal machines
    without an MMU, this can corrupt the OS itself, causing massive
    lossage. Other frenetic dances such as the rhumba, cha-cha, or
    watusi, may be substituted. See
                aliasing bug
                ,

                precedence lossage
                ,
```

                    smash the stack
                    ,
                    memory leak
                    ,
                    memory smash
                    ,
                    overrun screw
                    ,
                    core
                    .

FAQ /F-A-Q/ or /fak/ n.   [Usenet] 1. A Frequently Asked
   Question. 2. A compendium of accumulated lore, posted periodically
   to high-volume newsgroups in an attempt to forestall such
   questions. Some people prefer the term 'FAQ list' or 'FAQL'
   /fa'kl/, reserving 'FAQ' for sense 1.

   This lexicon itself serves as a good example of a collection of one
   kind of lore, although it is far too big for a regular FAQ
   posting. Examples: "What is the proper type of NULL?" and
   "What's that funny name for the '#' character?" are both
   Frequently Asked Questions. Several FAQs refer readers to
   this file.

FAQ list /F-A-Q list/ or /fak list/ n.   [Usenet] Syn

                FAQ
                , sense 2.

FAQL /fa'kl/ n. Syn.
                FAQ list
                .

faradize /far'*-di:z/ v. [US Geological Survey] To start any
   hyper-addictive process or trend, or to continue adding current to
   such a trend. Telling one user about a new octo-tetris game you
   compiled would be a faradizing act -- in two weeks you might find
   your entire department playing the faradic game.

farkled /far'kld/ adj. [DeVry Institute of Technology,
   Atlanta] Syn.
                hosed
                . Poss. owes something to Yiddish
   'farblondjet' and/or the 'Farkle Family' skits on "Rowan
   and Martin's Laugh-In", a popular comedy show of the early 1970s.

farming n. [Adelaide University, Australia] What the heads
   of a disk drive are said to do when they plow little furrows in the
   magnetic media. Associated with a
                crash
                . Typically used as
   follows: "Oh no, the machine has just crashed; I hope the hard
   drive hasn't gone
                farming
                 again."

fascist adj. 1. Said of a computer system with excessive or
   annoying security barriers, usage limits, or access policies. The
   implication is that said policies are preventing hackers from
   getting interesting work done. The variant 'fascistic' seems to
   have been preferred at MIT, poss. by analogy with 'touristic'
   (see
                tourist
). 2. In the design of languages and other
   software tools, 'the fascist alternative' is the most restrictive
   and structured way of capturing a particular function; the
   implication is that this may be desirable in order to simplify the
   implementation or provide tighter error checking. Compare

                bondage-and-discipline language
                , although that term is global
   rather than local.

fat electrons n. Old-time hacker David Cargill's theory on
   the causation of computer glitches. Your typical electric utility
   draws its line current out of the big generators with a pair of
   coil taps located near the top of the dynamo. When the normal tap
   brushes get dirty, they take them off line to clean them up, and
   use special auxiliary taps on the *bottom* of the coil. Now,
   this is a problem, because when they do that they get not ordinary
   or 'thin' electrons, but the fat'n'sloppy electrons that are
   heavier and so settle to the bottom of the generator. These flow
   down ordinary wires just fine, but when they have to turn a sharp
   corner (as in an integrated-circuit via), they're apt to get stuck.
   This is what causes computer glitches. [Fascinating. Obviously,
   fat electrons must gain mass by
                bogon
                 absorption -- ESR]
   Compare
                bogon
                ,
                magic smoke
                .

faulty adj. Non-functional; buggy. Same denotation as

                bletcherous
                ,
                losing
                , q.v., but the connotation is much
   milder.

fd leak /F-D leek/ n. A kind of programming bug analogous
   to a
                core leak
                , in which a program fails to close file
   descriptors ('fd's) after file operations are completed, and
   thus eventually runs out of them. See
                leak
                .

fear and loathing n. [from Hunter S. Thompson] A state
   inspired by the prospect of dealing with certain real-world systems

```
    and standards that are totally
                brain-damaged
                 but ubiquitous
    -- Intel 8086s, or
                COBOL
                , or
                EBCDIC
                , or any
                IBM
                  machine except the Rios (a.k.a. the RS/6000).  "Ack!  They want
    PCs to be able to talk to the AI machine.  Fear and loathing
    time!"
```

feature n. 1. A good property or behavior (as of a
    program). Whether it was intended or not is immaterial. 2. An
    intended property or behavior (as of a program). Whether it is
    good or not is immaterial (but if bad, it is also a

                misfeature
). 3. A surprising property or behavior; in
    particular, one that is purposely inconsistent because it works
    better that way -- such an inconsistency is therefore a

                feature
                 and not a
                bug
                . This kind of feature is sometimes
    called a
                miswart
                ; see that entry for a classic example. 4. A
    property or behavior that is gratuitous or unnecessary, though
    perhaps also impressive or cute. For example, one feature of
    Common LISP's 'format' function is the ability to print
    numbers in two different Roman-numeral formats (see

                bells, whistles, and gongs
). 5. A property or behavior that was
    put in to help someone else but that happens to be in your way. 6.
    A bug that has been documented. To call something a feature sometimes
    means the author of the program did not consider the particular
    case, and that the program responded in a way that was unexpected
    but not strictly incorrect. A standard joke is that a bug can be
    turned into a
                feature
                 simply by documenting it (then
    theoretically no one can complain about it because it's in the
    manual), or even by simply declaring it to be good. "That's not a
    bug, that's a feature!" is a common catchphrase. See also

                feetch feetch
                ,
                creeping featurism
                ,
                wart
                ,
                green lightning
                .

The relationship among bugs, features, misfeatures, warts, and
miswarts might be clarified by the following hypothetical exchange
between two hackers on an airliner:

A: "This seat doesn't recline."

B: "That's not a bug, that's a feature. There is an emergency
exit door built around the window behind you, and the route has to
be kept clear."

A: "Oh. Then it's a misfeature; they should have increased the
spacing between rows here."

B: "Yes. But if they'd increased spacing in only one section it
would have been a wart -- they would've had to make
nonstandard-length ceiling panels to fit over the displaced
seats."

A: "A miswart, actually. If they increased spacing throughout
they'd lose several rows and a chunk out of the profit margin. So
unequal spacing would actually be the Right Thing."

B: "Indeed."

'Undocumented feature' is a common, allegedly humorous euphemism
for a

        bug

        . There's a related joke that is sometimes referred
to as the "one-question geek test". You say to someone "I saw a
Volkswagen Beetle today with a vanity license plate that read
FEATURE". If he/she laughs, he/she is a geek (see

        computer geek

        ,
sense #2).

feature creature n. [poss. fr. slang 'creature feature'
for a horror movie] 1. One who loves to add features to designs or
programs, perhaps at the expense of coherence, concision, or

        taste

        . 2. Alternately, a mythical being that induces
otherwise rational programmers to perpetrate such crocks. See also

        feeping creaturism

        ,
        creeping featurism

        .

feature key n. The Macintosh key with the cloverleaf
graphic on its keytop; sometimes referred to as 'flower',
'pretzel', 'clover', 'propeller', 'beanie' (an apparent
reference to the major feature of a propeller beanie),

        splat

        ,
or the 'command key'. The Mac's equivalent of an

        alt

key.
   The proliferation of terms for this creature may illustrate one
   subtle peril of iconic interfaces.

   Many people have been mystified by the cloverleaf-like symbol that
   appears on the feature key. Its oldest name is 'cross of St.
   Hannes', but it occurs in pre-Christian Viking art as a decorative
   motif. Throughout Scandinavia today the road agencies use it to
   mark sites of historical interest. Apple picked up the symbol from
   an early Mac developer who happened to be Swedish. Apple
   documentation gives the translation "interesting feature"!

   There is some dispute as to the proper (Swedish) name of this
   symbol. It technically stands for the word 'sev"ardhet'
   (interesting feature) many of these are old churches. Some Swedes
   report as an idiom for it the word 'kyrka', cognate to English
   'church' and Scots-dialect 'kirk' but pronounced /shir'k*/ in
   modern Swedish. Others say this is nonsense. Another idiom
   reported for the sign is 'runsten' /roon'stn/, derived from
   the fact that many of the interesting sites are Viking
   rune-stones.

feature shock n. [from Alvin Toffler's book title
   "Future Shock"] A user's (or programmer's!) confusion when
   confronted with a package that has too many features and poor
   introductory material.

featurectomy /fee'ch*r-ek't*-mee/ n. The act of removing
   a feature from a program. Featurectomies come in two flavors, the
   'righteous' and the 'reluctant'. Righteous featurectomies are
   performed because the remover believes the program would be more
   elegant without the feature, or there is already an equivalent and
   better way to achieve the same end. (Doing so is not quite the
   same thing as removing a
                misfeature
                .) Reluctant
   featurectomies are performed to satisfy some external constraint
   such as code size or execution speed.

feep /feep/ 1. n. The soft electronic 'bell' sound of a
   display terminal (except for a VT-52); a beep (in fact, the
   microcomputer world seems to prefer
                beep
). 2. vi. To cause
   the display to make a feep sound. ASR-33s (the original TTYs) do
   not feep; they have mechanical bells that ring. Alternate forms:

                beep
                , 'bleep', or just about anything suitably onomatopoeic.
   (Jeff MacNelly, in his comic strip "Shoe", uses the word
   'eep' for sounds made by computer terminals and video games; this
   is perhaps the closest written approximation yet.) The term
   'breedle' was sometimes heard at SAIL, where the terminal
   bleepers are not particularly soft (they sound more like the
   musical equivalent of a raspberry or Bronx cheer; for a close
   approximation, imagine the sound of a Star Trek communicator's beep
   lasting for five seconds). The 'feeper' on a VT-52 has been

compared to the sound of a '52 Chevy stripping its gears. See also

ding
.

feeper /fee'pr/ n. The device in a terminal or
   workstation (usually a loudspeaker of some kind) that makes the

feep
 sound.

feeping creature n. [from
                feeping creaturism
                ] An
   unnecessary feature; a bit of
                chrome
                 that, in the speaker's
   judgment, is the camel's nose for a whole horde of new features.

feeping creaturism /fee'ping kree'ch*r-izm/ n. A
   deliberate spoonerism for
                creeping featurism
                , meant to imply
   that the system or program in question has become a misshapen
   creature of hacks. This term isn't really well defined, but it
   sounds so neat that most hackers have said or heard it. It is
   probably reinforced by an image of terminals prowling about in the
   dark making their customary noises.

feetch feetch /feech feech/ interj. If someone tells you
   about some new improvement to a program, you might respond:
   "Feetch, feetch!" The meaning of this depends critically on
   vocal inflection. With enthusiasm, it means something like "Boy,
   that's great! What a great hack!" Grudgingly or with obvious
   doubt, it means "I don't know; it sounds like just one more
   unnecessary and complicated thing". With a tone of resignation,
   it means, "Well, I'd rather keep it simple, but I suppose it has
   to be done".

fence n. 1. A sequence of one or more distinguished
   (
                out-of-band
) characters (or other data items), used to
   delimit a piece of data intended to be treated as a unit (the
   computer-science literature calls this a 'sentinel'). The NUL
   (ASCII 0000000) character that terminates strings in C is a fence.
   Hex FF is also (though slightly less frequently) used this way.
   See
                zigamorph
                . 2. An extra data value inserted in an array or
   other data structure in order to allow some normal test on the
   array's contents also to function as a termination test. For
   example, a highly optimized routine for finding a value in an array
   might artificially place a copy of the value to be searched for
   after the last slot of the array, thus allowing the main search
   loop to search for the value without having to check at each pass
   whether the end of the array had been reached. 3. [among users of

optimizing compilers] Any technique, usually exploiting knowledge
about the compiler, that blocks certain optimizations. Used when
explicit mechanisms are not available or are overkill. Typically a
hack: "I call a dummy procedure there to force a flush of the
optimizer's register-coloring info" can be expressed by the
shorter "That's a fence procedure".

fencepost error n. 1. A problem with the discrete
equivalent of a boundary condition, often exhibited in programs by
iterative loops. From the following problem: "If you build a
fence 100 feet long with posts 10 feet apart, how many posts do you
need?" (Either 9 or 11 is a better answer than the obvious 10.)
For example, suppose you have a long list or array of items, and
want to process items m through n; how many items are
there? The obvious answer is n − m, but that is off by one;
the right answer is n − m + 1. A program that used the
'obvious' formula would have a fencepost error in it. See also

            zeroth
             and
            off-by-one error
            , and note that not all
off-by-one errors are fencepost errors. The game of Musical Chairs
involves a catastrophic off-by-one error where N people try
to sit in N − 1 chairs, but it's not a fencepost error.
Fencepost errors come from counting things rather than the spaces
between them, or vice versa, or by neglecting to consider whether
one should count one or both ends of a row. 2. [rare] An error
induced by unexpected regularities in input values, which can (for
instance) completely thwart a theoretically efficient binary tree
or hash table implementation. (The error here involves the
difference between expected and worst case behaviors of an
algorithm.)

fepped out /fept owt/ adj. The Symbolics 3600 LISP
Machine has a Front-End Processor called a 'FEP' (compare sense 2
of
            box
). When the main processor gets
            wedged
            , the FEP
takes control of the keyboard and screen. Such a machine is said
to have 'fepped out' or 'dropped into the fep'.

FidoNet n. A worldwide hobbyist network of personal
computers which exchanges mail, discussion groups, and files.
Founded in 1984 and originally consisting only of IBM PCs and
compatibles, FidoNet now includes such diverse machines as Apple
][s, Ataris, Amigas, and Unix systems. Though it is much younger
than
            Usenet
            , FidoNet is already (in early 1991) a significant
fraction of Usenet's size at some 8000 systems.

field circus n. [a derogatory pun on 'field service'] The
field service organization of any hardware manufacturer, but
especially DEC. There is an entire genre of jokes about DEC field

```
    circus engineers:

       Q: How can you recognize a DEC field circus engineer
          with a flat tire?
       A: He's changing one tire at a time to see which one is flat.

       Q: How can you recognize a DEC field circus engineer
          who is out of gas?
       A: He's changing one tire at a time to see which one is flat.

    [See
                Easter egging
                 for additional insight on these jokes.]

    There is also the 'Field Circus Cheer' (from the
                plan file
                 for
    DEC on MIT-AI):

      Maynard! Maynard!
      Don't mess with us!
      We're mean and we're tough!
      If you get us confused
      We'll screw up your stuff.

    (DEC's service HQ is located in Maynard, Massachusetts.)
```

field servoid [play on 'android'] /fee'ld ser'voyd/ n.
   Representative of a field service organization (see

                field circus
). This has many of the implications of
                droid
                .

Fight-o-net n. [FidoNet] Deliberate distortion of
                FidoNet
                ,
   often applied after a flurry of
                flamage
                 in a particular

                echo
                , especially the SYSOP echo or Fidonews (see
                'Snooze
).

File Attach [FidoNet] 1. n. A file sent along with a mail
   message from one BBS to another. 2. vt. Sending someone a file by
   using the File Attach option in a BBS mailer.

File Request [FidoNet] 1. n. The
                FidoNet
                 equivalent of

                FTP
                , in which one BBS system automatically dials another and

                    snarf
                    s one or more files. Often abbreviated 'FReq'; files
    are often announced as being "available for FReq" in the same way
    that files are announced as being "available for/by anonymous
    FTP" on the Internet. 2. vt. The act of getting a copy of a file
    by using the File Request option of the BBS mailer.

file signature n. A
                    magic number
                    , sense 3.

filk /filk/ n.,v. [from SF fandom, where a typo for
    'folk' was adopted as a new word] A popular or folk song with
    lyrics revised or completely new lyrics, intended for humorous
    effect when read, and/or to be sung late at night at SF
    conventions. There is a flourishing subgenre of these called
    'computer filks', written by hackers and often containing rather
    sophisticated technical humor. See
                    double bucky
                     for an
    example. Compare
                    grilf
                    ,
                    hing
                     and
                    newsfroup
                    .

film at 11 [MIT: in parody of TV newscasters] 1. Used in
    conversation to announce ordinary events, with a sarcastic
    implication that these events are earth-shattering. "
                    ITS
                     crashes; film at 11." "Bug found in scheduler; film at 11."
    2. Also widely used outside MIT to indicate that additional
    information will be available at some future time, *without*
    the implication of anything particularly ordinary about the
    referenced event. For example, "The mail file server died this
    morning; we found garbage all over the root directory. Film at
    11." would indicate that a major failure had occurred but that the
    people working on it have no additional information about it as
    yet; use of the phrase in this way suggests gently that the problem
    is liable to be fixed more quickly if the people doing the fixing
    can spend time doing the fixing rather than responding to
    questions, the answers to which will appear on the normal "11:00
    news", if people will just be patient.

filter n. [orig.
                    Unix
                    , now also in
                    MS-DOS
                    ] A
    program that processes an input data stream into an output data
    stream in some well-defined way, and does no I/O to anywhere else
    except possibly on error conditions; one designed to be used as a
    stage in a 'pipeline' (see
                    plumbing

). Compare
                sponge
                .

Finagle's Law n. The generalized or 'folk' version of

                Murphy's Law
                , fully named "Finagle's Law of Dynamic
   Negatives" and usually rendered "Anything that can go wrong,
   will". One variant favored among hackers is "The perversity of
   the Universe tends towards a maximum" (but see also

                Hanlon's Razor
). The label 'Finagle's Law' was popularized by SF
   author Larry Niven in several stories depicting a frontier culture of
   asteroid miners; this 'Belter' culture professed a religion
   and/or running joke involving the worship of the dread god Finagle
   and his mad prophet Murphy.

fine adj. [WPI] Good, but not good enough to be
                cuspy
                .
   The word 'fine' is used elsewhere, of course, but without the
   implicit comparison to the higher level implied by
                cuspy
                .

finger [WAITS, via BSD Unix] 1. n. A program that displays
   information about a particular user or all users logged on the
   system, or a remote system. Typically shows full name, last login
   time, idle time, terminal line, and terminal location (where
   applicable). May also display a
                plan file
                 left by the user
   (see also
                Hacking X for Y
). 2. vt. To apply finger to a
   username. 3. vt. By extension, to check a human's current state by
   any means. "Foodp?" "T!" "OK, finger Lisa and see if she's
   idle." 4. Any picture (composed of ASCII characters) depicting
   'the finger'. Originally a humorous component of one's plan file
   to deter the curious fingerer (sense 2), it has entered the arsenal
   of some
                flamer
                s.

finger trouble n. Mistyping, typos, or generalized keyboard
   incompetence (this is surprisingly common among hackers, given the
   anount of time they spend at keyboards). "I keep putting colons at
   the end of statements instead of semicolons", "Finger-trouble
   again, eh?".

finger-pointing syndrome n. All-too-frequent result of
   bugs, esp. in new or experimental configurations. The hardware
   vendor points a finger at the software. The software vendor points
   a finger at the hardware. All the poor users get is the finger.

finn v.   [IRC] To pull rank on somebody based on the amount
   of time one has spent on
                   IRC
                   . The term derives from the fact
   that IRC was originally written in Finland in 1987. There may be
   some influence from the 'Finn' character in William Gibson's
   seminal cyberpunk novel "Count Zero", who at one point says to
   another (much younger) character "I have a pair of shoes older
   than you are, so shut up!"

firebottle n. A large, primitive, power-hungry active
   electrical device, similar in function to a FET but constructed out
   of glass, metal, and vacuum. Characterized by high cost, low
   density, low reliability, high-temperature operation, and high
   power dissipation. Sometimes mistakenly called a 'tube' in the
   U.S. or a 'valve' in England; another hackish term is

                   glassfet
                   .

firefighting n. 1. What sysadmins have to do to correct
   sudden operational problems. An opposite of hacking. "Been
   hacking your new newsreader?" "No, a power glitch hosed the
   network and I spent the whole afternoon fighting fires." 2. The
   act of throwing lots of manpower and late nights at a project,
   esp. to get it out before deadline. See also
                   gang bang
                   ,

                   Mongolian Hordes technique
                   ; however, the term 'firefighting'
   connotes that the effort is going into chasing bugs rather than
   adding features.

firehose syndrome n. In mainstream folklore it is observed
   that trying to drink from a firehose can be a good way to rip your
   lips off. On computer networks, the absence or failure of flow
   control mechanisms can lead to situations in which the sending
   system sprays a massive flood of packets at an unfortunate
   receiving system, more than it can handle. Compare
                   overrun
                   ,

                   buffer overflow
                   .

firewall code n. 1. The code you put in a system (say, a
   telephone switch) to make sure that the users can't do any
   damage. Since users always want to be able to do everything but
   never want to suffer for any mistakes, the construction of a
   firewall is a question not only of defensive coding but also of
   interface presentation, so that users don't even get curious about
   those corners of a system where they can burn themselves.
   2. Any sanity check inserted to catch a
                   can't happen
                    error.
   Wise programmers often change code to fix a bug twice: once to fix

    the bug, and once to insert a firewall which would have arrested
    the bug before it did quite as much damage.

firewall machine n. A dedicated gateway machine with
    special security precautions on it, used to service outside network
    connections and dial-in lines. The idea is to protect a cluster of
    more loosely administered machines hidden behind it from

                cracker
                s. The typical firewall is an inexpensive micro-based
    Unix box kept clean of critical data, with a bunch of modems and
    public network ports on it but just one carefully watched
    connection back to the rest of the cluster. The special
    precautions may include threat monitoring, callback, and even a
    complete
                iron box
                 keyable to particular incoming IDs or
    activity patterns. Syn.
                flytrap
                ,
                Venus flytrap
                .

fireworks mode n. The mode a machine is sometimes said to
    be in when it is performing a
                crash and burn
                 operation.

firmy /fer'mee/ Syn.
                stiffy
                 (a 3.5-inch floppy
    disk).

fish n. [Adelaide University, Australia] 1. Another

                metasyntactic variable
                . See
                foo
                . Derived originally
    from the Monty Python skit in the middle of "The Meaning of
    Life" entitled "Find the Fish". 2. A pun for 'microfiche'.
    A microfiche file cabinet may be referred to as a 'fish tank'.

FISH queue n. [acronym, by analogy with FIFO (First In,
    First Out)] 'First In, Still Here'. A joking way of pointing out
    that processing of a particular sequence of events or requests has
    stopped dead. Also 'FISH mode' and 'FISHnet'; the latter may
    be applied to any network that is running really slowly or
    exhibiting extreme flakiness.

FITNR // [Thinking Machines, Inc.] Fixed In the Next
    Release. A written-only notation attached to bug reports. Often
    wishful thinking.

fix n.,v. What one does when a problem has been reported
    too many times to be ignored.

FIXME imp. A standard tag often put in C comments near a
   piece of code that needs work. The point of doing so is that a
   'grep' or a similar pattern-matching tool can find all such
   places quickly.

     FIXME: note this is common in
               GNU
                code.

   Compare
               XXX
               .

flag n. A variable or quantity that can take on one of two
   values; a bit, particularly one that is used to indicate one of two
   outcomes or is used to control which of two things is to be done.
   "This flag controls whether to clear the screen before printing
   the message." "The program status word contains several flag
   bits." Used of humans analogously to
               bit
               . See also

               hidden flag
               ,
               mode bit
               .

flag day n. A software change that is neither forward- nor
   backward-compatible, and which is costly to make and costly to
   reverse. "Can we install that without causing a flag day for all
   users?" This term has nothing to do with the use of the word

               flag
                to mean a variable that has two values. It came into use
   when a massive change was made to the
               Multics
                timesharing
   system to convert from the old ASCII code to the new one; this was
   scheduled for Flag Day (a U.S. holiday), June 14, 1966. See also

               backward combatability
               .

flaky adj. (var sp. 'flakey') Subject to frequent

               lossage
               . This use is of course related to the common slang
   use of the word to describe a person as eccentric, crazy, or just
   unreliable. A system that is flaky is working, sort of -- enough
   that you are tempted to try to use it -- but fails frequently
   enough that the odds in favor of finishing what you start are low.
   Commonwealth hackish prefers
               dodgy
                or
               wonky
               .

flamage /flay'm*j/ n. Flaming verbiage, esp. high-noise,
   low-signal postings to
                  Usenet
                   or other electronic
                  fora
                  .
   Often in the phrase 'the usual flamage'. 'Flaming' is the act
   itself; 'flamage' the content; a 'flame' is a single flaming
   message. See
                  flame
                  , also
                  dahmum
                  .

flame 1. vi. To post an email message intended to insult
   and provoke. 2. vi. To speak incessantly and/or rabidly on some
   relatively uninteresting subject or with a patently ridiculous
   attitude. 3. vt. Either of senses 1 or 2, directed with hostility
   at a particular person or people. 4. n. An instance of flaming.
   When a discussion degenerates into useless controversy, one might
   tell the participants "Now you're just flaming" or "Stop all
   that flamage!" to try to get them to cool down (so to speak).

   The term may have been independently invented at several different
   places. It has been reported from MIT, Carleton College and RPI
   (among many other places) from as far back as 1969.

   It is possible that the hackish sense of 'flame' is much older than
   that. The poet Chaucer was also what passed for a wizard hacker in
   his time; he wrote a treatise on the astrolabe, the most advanced
   computing device of the day. In Chaucer's "Troilus and
   Cressida", Cressida laments her inability to grasp the proof of a
   particular mathematical theorem; her uncle Pandarus then observes
   that it's called "the fleminge of wrecches." This phrase seems
   to have been intended in context as "that which puts the wretches
   to flight" but was probably just as ambiguous in Middle English as
   "the flaming of wretches" would be today. One suspects that
   Chaucer would feel right at home on Usenet.

flame bait n. A posting intended to trigger a
                  flame war
                  ,
   or one that invites flames in reply. See also
                  troll
                  .

flame on vi.,interj. 1. To begin to
                  flame
                  . The
   punning reference to Marvel Comics's Human Torch is no longer
   widely recognized. 2. To continue to flame. See
                  rave
                  ,
                  burble
                  .

flame war n. (var. 'flamewar') An acrimonious dispute,
   especially when conducted on a public electronic forum such as

                Usenet
                .

flamer n. One who habitually
                flame
                s. Said esp. of
   obnoxious
                Usenet
                 personalities.

flap vt. 1. To unload a DECtape (so it goes flap, flap,
   flap...). Old-time hackers at MIT tell of the days when the
   disk was device 0 and
                microtape
                s were 1, 2,... and
   attempting to flap device 0 would instead start a motor banging
   inside a cabinet near the disk. 2. By extension, to unload any
   magnetic tape. See also
                macrotape
                . Modern cartridge tapes no
   longer actually flap, but the usage has remained. (The term could
   well be re-applied to DEC's TK50 cartridge tape drive, a
   spectacularly misengineered contraption which makes a loud flapping
   sound, almost like an old reel-type lawnmower, in one of its many
   tape-eating failure modes.)

flarp /flarp/ n. [Rutgers University] Yet another

                metasyntactic variable
                 (see
                foo
). Among those who use
   it, it is associated with a legend that any program not containing
   the word 'flarp' somewhere will not work. The legend is
   discreetly silent on the reliability of programs which *do*
   contain the magic word.

flat adj. 1. Lacking any complex internal structure.
   "That
                bitty box
                 has only a flat filesystem, not a
   hierarchical one." The verb form is
                flatten
                . 2. Said of a
   memory architecture (like that of the VAX or 680x0) that is one big
   linear address space (typically with each possible value of a
   processor register corresponding to a unique core address), as
   opposed to a 'segmented' architecture (like that of the 80x86) in
   which addresses are composed from a base-register/offset pair
   (segmented designs are generally considered
                cretinous
).

   Note that sense 1 (at least with respect to filesystems) is usually

       used pejoratively, while sense 2 is a
                    Good Thing
                    .

flat-ASCII adj. Said of a text file that contains only
    7-bit ASCII characters and uses only ASCII-standard control
    characters (that is, has no embedded codes specific to a particular
    text formatter markup language, or output device, and no

                    meta
                    -characters). Syn.
                    plain-ASCII
                    . Compare

                    flat-file
                    .

flat-file adj. A
                    flatten
                    ed representation of some
    database or tree or network structure as a single file from which
    the structure could implicitly be rebuilt, esp. one in

                    flat-ASCII
                     form. See also
                    sharchive
                    .

flatten vt. To remove structural information, esp. to
    filter something with an implicit tree structure into a simple
    sequence of leaves; also tends to imply mapping to

                    flat-ASCII
                    . "This code flattens an expression with
    parentheses into an equivalent
                    canonical
                     form."

flavor n. 1. Variety, type, kind. "DDT commands come in
    two flavors." "These lights come in two flavors, big red ones
    and small green ones." See
                    vanilla
                    . 2. The attribute that
    causes something to be
                    flavorful
                    . Usually used in the phrase
    "yields additional flavor". "This convention yields additional
    flavor by allowing one to print text either right-side-up or
    upside-down." See
                    vanilla
                    . This usage was certainly
    reinforced by the terminology of quantum chromodynamics, in which
    quarks (the constituents of, e.g., protons) come in six flavors
    (up, down, strange, charm, top, bottom) and three colors (red,
    blue, green) -- however, hackish use of 'flavor' at MIT predated
    QCD. 3. The term for 'class' (in the object-oriented sense) in
    the LISP Machine Flavors system. Though the Flavors design has

been superseded (notably by the Common LISP CLOS facility), the
term 'flavor' is still used as a general synonym for 'class'
by some LISP hackers.

flavorful adj. Full of
               flavor
                (sense 2); esthetically
   pleasing. See
               random
                and
               losing
                for antonyms. See also
   the entries for
               taste
                and
               elegant
                .

flippy /flip'ee/ n. A single-sided floppy disk altered
   for double-sided use by addition of a second write-notch, so called
   because it must be flipped over for the second side to be
   accessible. No longer common.

flood v. [IRC] To dump large amounts of text onto an

               IRC
                channel. This is especially rude when the text is
   uninteresting and the other users are trying to carry on a serious
   conversation.

flowchart n. [techspeak] An archaic form of visual
   control-flow specification employing arrows and 'speech
   balloons' of various shapes. Hackers never use flowcharts,
   consider them extremely silly, and associate them with
               COBOL
                  programmers,
               card walloper
               s, and other lower forms of life.
   This attitude follows from the observations that flowcharts (at
   least from a hacker's point of view) are no easier to read than
   code, are less precise, and tend to fall out of sync with the code
   (so that they either obfuscate it rather than explaining it, or
   require extra maintenance effort that doesn't improve the code).
   See also
               pdl
               , sense 3.

flower key n. [Mac users] See
               feature key
                .

flush v. 1. To delete something, usually superfluous, or to
   abort an operation. "All that nonsense has been flushed."
   2. [Unix/C] To force buffered I/O to disk, as with an
   'fflush(3)' call. This is *not* an abort or deletion as
   in sense 1, but a demand for early completion! 3. To leave at the
   end of a day's work (as opposed to leaving for a meal). "I'm

going to flush now." "Time to flush." 4. To exclude someone
from an activity, or to ignore a person.

'Flush' was standard ITS terminology for aborting an output
operation; one spoke of the text that would have been printed, but
was not, as having been flushed. It is speculated that this term
arose from a vivid image of flushing unwanted characters by hosing
down the internal output buffer, washing the characters away before
they could be printed. The Unix/C usage, on the other hand, was
propagated by the 'fflush(3)' call in C's standard I/O library
(though it is reported to have been in use among BLISS programmers
at DEC and on Honeywell and IBM machines as far back as 1965).
Unix/C hackers find the ITS usage confusing, and vice versa.

flypage /fli:'payj/ n. (alt. 'fly page') A
               banner
               ,
    sense 1.

Flyspeck 3 n. Standard name for any font that is so tiny as
    to be unreadable (by analogy with names like 'Helvetica 10' for
    10-point Helvetica). Legal boilerplate is usually printed in
    Flyspeck 3.

flytrap n. See
               firewall machine
               .

FM /F-M/ n. 1. *Not* 'Frequency Modulation' but
    rather an abbreviation for 'Fucking Manual', the back-formation
    from
               RTFM
               . Used to refer to the manual itself in the

               RTFM
               . "Have you seen the Networking FM lately?"
    2. Abbreviation for "Fucking Magic", used in the sense of

               black magic
               .

fnord n. [from the "Illuminatus Trilogy"] 1. A word
    used in email and news postings to tag utterances as surrealist
    mind-play or humor, esp. in connection with
               Discordianism
                and
    elaborate conspiracy theories. "I heard that David Koresh is
    sharing an apartment in Argentina with Hitler. (Fnord.)" "Where
    can I fnord get the Principia Discordia from?" 2. A

               metasyntactic variable
               , commonly used by hackers with ties to

               Discordianism
                or the
               Church of the SubGenius
               .

FOAF // n.   [Usenet] Acronym for 'Friend Of A Friend'.
   The source of an unverified, possibly untrue story. This term was
   not originated by hackers (it is used in Jan Brunvand's books on
   urban folklore), but is much better recognized on Usenet and
   elsewhere than in mainstream English.

FOD /fod/ v.   [Abbreviation for 'Finger of Death',
   originally a spell-name from fantasy gaming] To terminate with
   extreme prejudice and with no regard for other people. From

                MUD
                s where the wizard command 'FOD <player>' results in the
   immediate and total death of <player>, usually as punishment for
   obnoxious behavior. This usage migrated to other circumstances,
   such as "I'm going to fod the process that is burning all the
   cycles." Compare
                gun
                .

   In aviation, FOD means Foreign Object Damage, e.g., what happens
   when a jet engine sucks up a rock on the runway or a bird in
   flight. Finger of Death is a distressingly apt description of
   what this generally does to the engine.

fold case v.   See
                smash case
                . This term tends to be
   used more by people who don't mind that their tools smash case. It
   also connotes that case is ignored but case distinctions in data
   processed by the tool in question aren't destroyed.

followup n.   On Usenet, a
                posting
                 generated in response
   to another posting (as opposed to a
                reply
                , which goes by email
   rather than being broadcast). Followups include the ID of the

                parent message
                 in their headers; smart news-readers can use
   this information to present Usenet news in 'conversation'
   sequence rather than order-of-arrival. See
                thread
                .

fontology n.   [XEROX PARC] The body of knowledge dealing
   with the construction and use of new fonts (e.g., for window
   systems and typesetting software). It has been said that fontology
   recapitulates file-ogeny.

   [Unfortunately, this reference to the embryological dictum that
   "Ontogeny recapitulates phylogeny" is not merely a joke. On the
   Macintosh, for example, System 7 has to go through contortions to
   compensate for an earlier design error that created a whole
   different set of abstractions for fonts parallel to 'files' and

‘folders’ -- ESR]

foo /foo/ 1. interj. Term of disgust. 2. Used very
   generally as a sample name for absolutely anything, esp. programs
   and files (esp. scratch files). 3. First on the standard list of

                 metasyntactic variable
                 s used in syntax examples. See also

                 bar
                 ,
                 baz
                 ,
                 qux
                 ,
                 quux
                 ,
                 corge
                 ,
                 grault
                 ,

                 garply
                 ,
                 waldo
                 ,
                 fred
                 ,
                 plugh
                 ,
                 xyzzy
                 ,

                 thud
                 .

   The etymology of hackish ‘foo’ is obscure. When used in
   connection with ‘bar’ it is generally traced to the WWII-era Army
   slang acronym FUBAR (‘Fucked Up Beyond All Repair’), later
   bowdlerized to
                 foobar
                 . (See also
                 FUBAR
).

   However, the use of the word ‘foo’ itself has more complicated
   antecedents, including a long history in comic strips and cartoons.
   The old "Smokey Stover" comic strips by Bill Holman often
   included the word ‘FOO’, in particular on license plates of cars;
   allegedly, ‘FOO’ and ‘BAR’ also occurred in Walt Kelly’s
   "Pogo" strips. In the 1938 cartoon "The Daffy Doc", a very
   early version of Daffy Duck holds up a sign saying "SILENCE IS
   FOO!"; oddly, this seems to refer to some approving or positive
   affirmative use of foo. It has been suggested that this might be
   related to the Chinese word ‘fu’ (sometimes transliterated
   ‘foo’), which can mean "happiness" when spoken with the proper
   tone (the lion-dog guardians flanking the steps of many Chinese

restaurants are properly called "fu dogs").

Paul Dickson's excellent book "Words" (Dell, 1982, ISBN
0-440-52260-7) traces "Foo" to an unspecified British naval
magazine in 1946, quoting as follows: "Mr. Foo is a mysterious
Second World War product, gifted with bitter omniscience and
sarcasm."

Other sources confirm that 'FOO' was a semi-legendary subject of
WWWII British-army grafitti more-or-less equivalent to the American
Kilroy. Where British troops went, the grafitti "FOO was here"
or something similar showed up. Several slang dictionaries aver
that FOO probably came from Forward Observation Officer. In this
connection, the later American military slang 'foo fighters' is
interesting; at least as far back as the 1950s, radar operators
used it for the kind of mysterious or spurious trace that would
later be called a UFO (the older term resurfaced in popular
American usage in 1995 via the name of one of the better
grunge-rock bands).

Earlier versions of this entry suggested the possibility that
hacker usage actually sprang from "FOO, Lampoons and Parody",
the title of a comic book first issued in September 1958, a joint
project of Charles and Robert Crumb. Though Robert Crumb (then in
his mid-teens) later became one of the most important and
influential artists in underground comics, this venture was hardly
a success; indeed, the brothers later burned most of the existing
copies in disgust. The title FOO was featured in large letters on
the front cover. However, very few copies of this comic actually
circulated, and students of Crumb's 'oeuvre' have established
that this title was a reference to the earlier Smokey Stover
comics.

An old-time member reports that in the 1959 "Dictionary of the
TMRC Language", compiled at
                TMRC
                , there was an entry that went
something like this:

  FOO: The first syllable of the sacred chant phrase "FOO MANE
  PADME HUM." Our first obligation is to keep the foo counters
  turning.

For more about the legendary foo counters, see
                TMRC
                . Almost
the entire staff of what later became the MIT AI LAB was involved
with TMRC, and probably picked the word up there.

Very probably, hackish 'foo' had no single origin and derives
through all these channels from Yiddish 'feh' and/or English
'fooey'.

foobar n. Another common
                metasyntactic variable
                ; see

foo
. Hackers do *not* generally use this to mean

FUBAR
 in either the slang or jargon sense.

fool n. As used by hackers, specifically describes a person
   who habitually reasons from obviously or demonstrably incorrect
   premises and cannot be persuaded by evidence to do otherwise; it is
   not generally used in its other senses, i.e., to describe a person
   with a native incapacity to reason correctly, or a clown. Indeed,
   in hackish experience many fools are capable of reasoning all too
   effectively in executing their errors. See also
                cretin
                ,

                loser
                ,
                fool file, the
                .

   The Algol 68-R compiler used to initialize its storage to the
   character string "F00LF00LF00LF00L..." because as a pointer or as
   a floating point number it caused a crash, and as an integer or a
   character string it was very recognizable in a dump. Sadly, one
   day a very senior professor at Nottingham University wrote a
   program that called him a fool. He proceeded to demonstrate the
   correctness of this assertion by lobbying the university (not quite
   successfully) to forbid the use of Algol on its computers. See
   also
                DEADBEEF
                .

fool file, the n. [Usenet] A notional repository of all the
   most dramatically and abysmally stupid utterances ever. An entire
   subgenre of
                sig block
                s consists of the header "From the fool
   file:" followed by some quote the poster wishes to represent as an
   immortal gem of dimwittery; for this usage to be really effective,
   the quote has to be so obviously wrong as to be laughable. More
   than one Usenetter has achieved an unwanted notoriety by being
   quoted in this way.

Foonly n. 1. The
                PDP-10
                 successor that was to have
   been built by the Super Foonly project at the Stanford Artificial
   Intelligence Laboratory along with a new operating system. The
   intention was to leapfrog from the old DEC timesharing system SAIL
   was then running to a new generation, bypassing TENEX which at that
   time was the ARPANET standard. ARPA funding for both the Super
   Foonly and the new operating system was cut in 1974. Most of the
   design team went to DEC and contributed greatly to the design of
   the PDP-10 model KL10. 2. The name of the company formed by Dave
   Poole, one of the principal Super Foonly designers, and one of
   hackerdom's more colorful personalities. Many people remember the

parrot which sat on Poole's shoulder and was a regular companion.
3. Any of the machines built by Poole's company. The first was the
F-1 (a.k.a. Super Foonly), which was the computational engine used
to create the graphics in the movie "TRON". The F-1 was the
fastest PDP-10 ever built, but only one was ever made. The effort
drained Foonly of its financial resources, and the company turned
towards building smaller, slower, and much less expensive machines.
Unfortunately, these ran not the popular
                TOPS-20
                 but a TENEX
variant called Foonex; this seriously limited their market. Also,
the machines shipped were actually wire-wrapped engineering
prototypes requiring individual attention from more than usually
competent site personnel, and thus had significant reliability
problems. Poole's legendary temper and unwillingness to suffer
fools gladly did not help matters. By the time of the Jupiter
project cancellation in 1983, Foonly's proposal to build another
F-1 was eclipsed by the
                Mars
                , and the company never quite
recovered. See the
                Mars
                 entry for the continuation and moral
of this story.

footprint n. 1. The floor or desk area taken up by a piece
   of hardware. 2. [IBM] The audit trail (if any) left by a crashed
   program (often in plural, 'footprints'). See also
                toeprint
                .
   3. "RAM footprint": The minimum amount of RAM which an OS or other
   program takes; this figure gives one one an idea of how much will
   be left for other applications. How actively this RAM is used is
   entirely another matter. Recent tendencies to featuritis and
   software bloat can expand the RAM footprint of an OS to the point
   of making it nearly unusable in practice. [This problem is,
   thankfully, limited to operating systems so stupid that they don't
   do virtual memory -- ESR]

for free adj. Said of a capability of a programming
   language or hardware equipment that is available by its design
   without needing cleverness to implement: "In APL, we get the
   matrix operations for free." "And owing to the way revisions are
   stored in this system, you get revision trees for free." The term
   usually refers to a serendipitous feature of doing things a certain
   way (compare
                big win
                ), but it may refer to an intentional but
   secondary feature.

for the rest of us adj. [from the Mac slogan "The computer
   for the rest of us"] 1. Used to describe a
                spiffy
                 product
   whose affordability shames other comparable products, or (more
   often) used sarcastically to describe
                spiffy

                    but very
    overpriced products. 2. Describes a program with a limited
    interface, deliberately limited capabilities, non-orthogonality,
    inability to compose primitives, or any other limitation designed
    to not 'confuse' a naive user. This places an upper bound on
    how far that user can go before the program begins to get in the
    way of the task instead of helping accomplish it. Used in
    reference to Macintosh software which doesn't provide obvious
    capabilities because it is thought that the poor lusers might not
    be able to handle them. Becomes 'the rest of *them*' when
    used in third-party reference; thus, "Yes, it is an attractive
    program, but it's designed for The Rest Of Them" means a program
    that superficially looks neat but has no depth beyond the surface
    flash. See also
                    WIMP environment
                    ,
                    Macintrash
                    ,

                    point-and-drool interface
                    ,
                    user-friendly
                    .

for values of [MIT] A common rhetorical maneuver at MIT is
    to use any of the canonical
                    random numbers
                     as placeholders for
    variables. "The max function takes 42 arguments, for arbitrary
    values of 42." "There are 69 ways to leave your lover, for 69 =
    50." This is especially likely when the speaker has uttered a
    random number and realizes that it was not recognized as such, but
    even 'non-random' numbers are occasionally used in this fashion.
    A related joke is that pi equals 3 -- for small values
    of pi and large values of 3.

    Historical note: st MIT this usage has traditionally been traced to
    the programming language MAD (Michigan Algorithm Decoder), an
    Algol-58-like language that was the most common choice among
    mainstream (non-hacker) users at MIT in the mid-60s. It inherited
    from Algol-58 a control structure FOR VALUES OF X = 3, 7, 99 DO
    ... that would repeat the indicated instructions for each value in
    the list (unlike the usual FOR that only works for arithmetic
    sequences of values). MAD is long extinct, but similar
    for-constructs still flourish (e.g., in Unix's shell languages).

fora pl.n. Plural of
                    forum
                    .

foreground vt. [Unix] To bring a task to the top of one's

                    stack
                     for immediate processing, and hackers often use it in
    this sense for non-computer tasks. "If your presentation is due
    next week, I guess I'd better foreground writing up the design
    document."

Technically, on a time-sharing system, a task executing in
foreground is one able to accept input from and return output to
the user; oppose
                background
                . Nowadays this term is primarily
associated with
                Unix
                , but it appears first to have been used
in this sense on OS/360. Normally, there is only one foreground
task per terminal (or terminal window); having multiple processes
simultaneously reading the keyboard is a good way to
                lose
                .

fork bomb n.   [Unix] A particular species of
                wabbit
                  that can be written in one line of C (`main()
{for(;;)fork();}') or shell (`$0 & $0 &') on any Unix system,
or occasionally created by an egregious coding bug. A fork bomb
process `explodes' by recursively spawning copies of itself
(using the Unix system call `fork(2)'). Eventually it eats
all the process table entries and effectively wedges the system.
Fortunately, fork bombs are relatively easy to spot and kill, so
creating one deliberately seldom accomplishes more than to bring
the just wrath of the gods down upon the perpetrator. See also

                logic bomb
                .

forked adj.   [Unix; prob. influenced by a mainstream
   expletive] Terminally slow, or dead. Originated when one system
   was slowed to a snail's pace by an inadvertent
                fork bomb
                .

Fortrash /for'trash/ n. Hackerism for the FORTRAN
   (FORmula TRANslator) language, referring to its primitive design,
   gross and irregular syntax, limited control constructs, and
   slippery, exception-filled semantics.

fortune cookie n. [WAITS, via Unix] A random quote, item of
   trivia, joke, or maxim printed to the user's tty at login time or
   (less commonly) at logout time. Items from this lexicon have often
   been used as fortune cookies. See
                cookie file
                .

forum n.   [Usenet, GEnie, CI$; pl. `fora' or `forums']
   Any discussion group accessible through a dial-in
                BBS
                , a

                mailing list
                , or a
                newsgroup
                 (see

                    network, the
). A
    forum functions much like a bulletin board; users submit

                    posting
                    s for all to read and discussion ensues. Contrast
    real-time chat via
                    talk mode
                     or point-to-point personal

                    email
                    .

fossil n. 1. In software, a misfeature that becomes
    understandable only in historical context, as a remnant of times
    past retained so as not to break compatibility. Example: the
    retention of octal as default base for string escapes in
                    C
                    , in
    spite of the better match of hexadecimal to ASCII and modern
    byte-addressable architectures. See
                    dusty deck
                    . 2. More
    restrictively, a feature with past but no present utility.
    Example: the force-all-caps (LCASE) bits in the V7 and
                    BSD
                       Unix tty driver, designed for use with monocase terminals. (In ←
                          a
    perversion of the usual backward-compatibility goal, this
    functionality has actually been expanded and renamed in some later

                    USG Unix
                     releases as the IUCLC and OLCUC bits.) 3. The FOSSIL
    (Fido/Opus/Seadog Standard Interface Level) driver specification
    for serial-port access to replace the
                    brain-dead
                     routines in
    the IBM PC ROMs. Fossils are used by most MS-DOS
                    BBS
                     software
    in preference to the 'supported' ROM routines, which do not support
    interrupt-driven operation or setting speeds above 9600; the use of
    a semistandard FOSSIL library is preferable to the
                    bare metal
                       serial port programming otherwise required. Since the FOSSIL
    specification allows additional functionality to be hooked in,
    drivers that use the
                    hook
                     but do not provide serial-port
    access themselves are named with a modifier, as in 'video
    fossil'.

four-color glossies n. 1. Literature created by

                    marketroid
                    s that allegedly contains technical specs but which
    is in fact as superficial as possible without being totally

content-free

. "Forget the four-color glossies, give me the
tech ref manuals." Often applied as an indication of
superficiality even when the material is printed on ordinary paper
in black and white. Four-color-glossy manuals are *never*
useful for finding a problem. 2. [rare] Applied by extension to
manual pages that don't contain enough information to diagnose why
the program doesn't produce the expected or desired output.

fragile adj. Syn

brittle

.

fred n. 1. The personal name most frequently used as a

metasyntactic variable
 (see
foo
). Allegedly popular
because it's easy for a non-touch-typist to type on a standard
QWERTY keyboard. Unlike
J. Random Hacker
 or 'J. Random
Loser', this name has no positive or negative loading (but see

Mbogo, Dr. Fred
). See also
barney
. 2. An acronym for
'Flipping Ridiculous Electronic Device'; other F-verbs may be
substituted for 'flipping'.

frednet /fred'net/ n. Used to refer to some
random
        and uncommon protocol encountered on a network. "We're
implementing bridging in our router to solve the frednet problem."

freeware n. Free software, often written by enthusiasts and
distributed by users' groups, or via electronic mail, local
bulletin boards,
Usenet
, or other electronic media. At one
time, 'freeware' was a trademark of Andrew Fluegelman, the author
of the well-known MS-DOS comm program PC-TALK III. It wasn't
enforced after his mysterious disappearance and presumed death in
1984. See
shareware
,
FRS
.

freeze v. To lock an evolving software distribution or
document against changes so it can be released with some hope of
stability. Carries the strong implication that the item in
question will 'unfreeze' at some future date. "OK, fix that
bug and we'll freeze for release."

There are more specific constructions on this term. A 'feature
freeze', for example, locks out modifications intended to introduce
new features but still allows bugfixes and completion of existing
features; a 'code freeze' connotes no more changes at all. At
Sun Microsystems and elsewhere, one may also hear references to
'code slush' -- that is, an almost-but-not-quite frozen state.

fried adj. 1. Non-working due to hardware failure; burnt
   out. Especially used of hardware brought down by a 'power
   glitch' (see
                glitch
                ),
                drop-outs
                , a short, or some other
   electrical event. (Sometimes this literally happens to electronic
   circuits! In particular, resistors can burn out and transformers
   can melt down, emitting noxious smoke -- see
                friode
                ,
                SED
                    and
                LER
                . However, this term is also used metaphorically.)
   Compare
                frotzed
                . 2. Of people, exhausted. Said particularly
   of those who continue to work in such a state. Often used as an
   explanation or excuse. "Yeah, I know that fix destroyed the file
   system, but I was fried when I put it in." Esp. common in
   conjunction with 'brain': "My brain is fried today, I'm very
   short on sleep."

frink /frink/ v. The unknown ur-verb, fill in your own
   meaning. Found esp. on the Usenet newsgroup alt.fan.lemurs,
   where it is said that the lemurs know what 'frink' means, but
   they aren't telling. Compare
                gorets
                .

friode /fri:'ohd/ n. [TMRC] A reversible (that is, fused
   or blown) diode. Compare
                fried
                ; see also
                SED
                ,
                LER
                .

fritterware n. An excess of capability that serves no
   productive end. The canonical example is font-diddling software on
   the Mac (see
                macdink
                ); the term describes anything that eats
   huge amounts of time for quite marginal gains in function but
   seduces people into using it anyway. See also
                window shopping

                        .

frob /frob/ 1. n.   [MIT] The
                    TMRC
                     definition was
   "FROB = a protruding arm or trunnion"; by metaphoric extension, a
   'frob' is any random small thing; an object that you can
   comfortably hold in one hand; something you can frob (sense 2).
   See
                    frobnitz
                    . 2. vt. Abbreviated form of
                    frobnicate
                    .
   3. [from the
                    MUD
                     world] A command on some MUDs that changes a
   player's experience level (this can be used to make wizards); also,
   to request
                    wizard
                     privileges on the 'professional courtesy'
   grounds that one is a wizard elsewhere. The command is actually
   'frobnicate' but is universally abbreviated to the shorter form.

frobnicate /frob'ni-kayt/ vt. [Poss. derived from

                    frobnitz
                    , and usually abbreviated to
                    frob
                    , but
   'frobnicate' is recognized as the official full form.] To
   manipulate or adjust, to tweak. One frequently frobs bits or other
   2-state devices. Thus: "Please frob the light switch" (that is,
   flip it), but also "Stop frobbing that clasp; you'll break it".
   One also sees the construction 'to frob a frob'. See
                    tweak
                      and
                    twiddle
                    .

   Usage: frob, twiddle, and tweak sometimes connote points along a
   continuum. 'Frob' connotes aimless manipulation; 'twiddle'
   connotes gross manipulation, often a coarse search for a proper
   setting; 'tweak' connotes fine-tuning. If someone is turning a
   knob on an oscilloscope, then if he's carefully adjusting it, he is
   probably tweaking it; if he is just turning it but looking at the
   screen, he is probably twiddling it; but if he's just doing it
   because turning a knob is fun, he's frobbing it. The variant
   'frobnosticate' has been recently reported.

frobnitz /frob'nits/, pl. 'frobnitzem' /frob'nit-zm/ or
   'frobni' /frob'ni:/ n. [TMRC] An unspecified physical
   object, a widget. Also refers to electronic black boxes. This
   rare form is usually abbreviated to 'frotz', or more commonly to

                    frob
                    . Also used are 'frobnule' (/frob'n[y]ool/) and
   'frobule' (/frob'yool/). Starting perhaps in 1979, 'frobozz'

    /fr*-boz'/ (plural: 'frobbotzim' /fr*-bot'zm/) has also
    become very popular, largely through its exposure as a name via

                Zork
                . These variants can also be applied to nonphysical
    objects, such as data structures.

    Pete Samson, compiler of the original
                TMRC
                 lexicon, adds,
    "Under the TMRC [railroad] layout were many storage boxes, managed
    (in 1958) by David R. Sawyer. Several had fanciful designations
    written on them, such as 'Frobnitz Coil Oil'. Perhaps DRS intended
    Frobnitz to be a proper name, but the name was quickly taken for
    the thing". This was almost certainly the origin of the
    term.

frog alt. 'phrog' 1. interj. Term of disgust (we seem
    to have a lot of them). 2. Used as a name for just about anything.
    See
                foo
                . 3. n. Of things, a crock. 4. n. Of people,
    somewhere in between a turkey and a toad. 5. 'froggy':
    adj. Similar to
                bagbiting
                , but milder. "This froggy program
    is taking forever to run!"

frogging [University of Waterloo] v. 1. Partial corruption
    of a text file or input stream by some bug or consistent glitch, as
    opposed to random events like line noise or media failures. Might
    occur, for example, if one bit of each incoming character on a tty
    were stuck, so that some characters were correct and others were
    not. See
                terminak
                 for a historical example. 2. By extension,
    accidental display of text in a mode where the output device emits
    special symbols or mnemonics rather than conventional ASCII. This
    often happens, for example, when using a terminal or comm program
    on a device like an IBM PC with a special 'high-half' character set
    and with the bit-parity assumption wrong. A hacker sufficiently
    familiar with ASCII bit patterns might be able to read the display
    anyway.

front end n. 1. An intermediary computer that does set-up
    and filtering for another (usually more powerful but less friendly)
    machine (a 'back end'). 2. What you're talking to when you have
    a conversation with someone who is making replies without paying
    attention. "Look at the dancing elephants!" "Uh-huh." "Do
    you know what I just said?" "Sorry, you were talking to the
    front end." See also
                fepped out
                . 3. Software that provides
    an interface to another program 'behind' it, which may not be as
    user-friendly. Probably from analogy with hardware front-ends (see
    sense 1) that interfaced with mainframes.

```
frotz /frots/  1. n. See
                 frobnitz
                 . 2. `mumble
   frotz': An interjection of mildest disgust.


frotzed /frotst/ adj.
                 down
                  because of hardware
   problems.  Compare
                 fried
                 . A machine that is merely frotzed
   may be fixable without replacing parts, but a fried machine is more
   seriously damaged.


frowney n.  (alt. `frowney face') See
                 emoticon
                 .


FRS  Abbreviation for "Freely Redistributable Software"
   which entered general use on the Internet in 1995 after years of
   low-level confusion over what exactly to call software written to
   be passed around and shared (contending terms including

                 freeware
                 ,
                 shareware
                 , and `sourceware' were never
   universally felt to be satisfactory for various subtle reasons).
   The first formal conference on freely-redistributable software will
   be held in Cambridge Massachussetts, February 1996 (sponsored by
   the Free Software Foundation) and used the FRS abbreviation heavily
   in its calls for papers and other literature during 1995; this was
   probably critical in helping establish the term.


fry  1. vi. To fail.  Said especially of smoke-producing
   hardware failures.  More generally, to become non-working.  Usage:
   never said of software, only of hardware and humans.  See

                 fried
                 ,
                 magic smoke
                 . 2. vt. To cause to fail; to

                 roach
                 ,
                 toast
                 , or
                 hose
                  a piece of hardware.  Never
   used of software or humans, but compare
                 fried
                 .


FSF abbrev. /F-S-F/  Common abbreviation (both spoken and
   written) for the name of the Free Software Foundation, a nonprofit
   educational association formed to support the
                 GNU
```

```
                    project.
```

FTP /F-T-P/, *not* /fit'ip/ 1. [techspeak] n. The
   File Transfer Protocol for transmitting files between systems on
   the Internet. 2. vt. To
                   beam
                    a file using the File Transfer
   Protocol. 3. Sometimes used as a generic even for file transfers
   not using
                   FTP
                   . "Lemme get a copy of "Wuthering
   Heights" ftp'd from uunet."

FUBAR n. The Failed UniBus Address Register in a VAX. A
   good example of how jargon can occasionally be snuck past the

                   suit
                   s; see
                   foobar
                   , and
                   foo
                    for a fuller etymology.

fuck me harder excl. Sometimes uttered in response to
   egregious misbehavior, esp. in software, and esp. of
   misbehaviors which seem unfairly persistent (as though designed in
   by the imp of the perverse). Often theatrically elaborated:
   "Aiighhh! Fuck me with a piledriver and 16 feet of curare-tipped
   wrought-iron fence *and no lubricants*!" The phrase is
   sometimes heard abbreviated 'FMH' in polite company.

   [This entry is an extreme example of the hackish habit of coining
   elaborate and evocative terms for lossage. Here we see a quite
   self-conscious parody of mainstream expletives that has become a
   running gag in part of the hacker culture; it illustrates the
   hackish tendency to turn any situation, even one of extreme
   frustration, into an intellectual game (the point being, in this
   case, to creatively produce a long-winded description of the
   most anatomically absurd mental image possible -- the short forms
   implicitly allude to all the ridiculous long forms ever spoken).
   Scatological language is actually relatively uncommon among
   hackers, and there was some controversy over whether this entry
   ought to be included at all. As it reflects a live usage
   recognizably peculiar to the hacker culture, we feel it is
   in the hackish spirit of truthfulness and opposition to all
   forms of censorship to record it here. -- ESR & GLS]

FUD /fuhd/ n. Defined by Gene Amdahl after he left IBM to
   found his own company: "FUD is the fear, uncertainty, and doubt
   that IBM sales people instill in the minds of potential customers
   who might be considering [Amdahl] products." The idea, of course,
   was to persuade them to go with safe IBM gear rather than with
   competitors' equipment. This implicit coercion was traditionally
   accomplished by promising that Good Things would happen to people
   who stuck with IBM, but Dark Shadows loomed over the future of
   competitors' equipment or software. See
                   IBM

.

FUD wars /fuhd worz/ n. [from
                FUD
                ] Political
   posturing engaged in by hardware and software vendors ostensibly
   committed to standardization but actually willing to fragment the
   market to protect their own shares. The Unix International vs.
   OSF conflict is but one outstanding example.

fudge 1. vt. To perform in an incomplete but marginally
   acceptable way, particularly with respect to the writing of a
   program. "I didn't feel like going through that pain and
   suffering, so I fudged it -- I'll fix it later." 2. n. The
   resulting code.

fudge factor n. A value or parameter that is varied in an
   ad hoc way to produce the desired result. The terms 'tolerance'
   and
                slop
                 are also used, though these usually indicate a
   one-sided leeway, such as a buffer that is made larger than
   necessary because one isn't sure exactly how large it needs to be,
   and it is better to waste a little space than to lose completely
   for not having enough. A fudge factor, on the other hand, can
   often be tweaked in more than one direction. A good example is the
   'fuzz' typically allowed in floating-point calculations: two
   numbers being compared for equality must be allowed to differ by a
   small amount; if that amount is too small, a computation may never
   terminate, while if it is too large, results will be needlessly
   inaccurate. Fudge factors are frequently adjusted incorrectly by
   programmers who don't fully understand their import. See also

                coefficient of X
                .

fuel up vi. To eat or drink hurriedly in order to get back
   to hacking. "Food-p?" "Yeah, let's fuel up." "Time for a

                great-wall
                !" See also
                oriental food
                .

Full Monty, the n. See
                monty
                , sense 2.

fum n. [XEROX PARC] At PARC, often the third of the
   standard
                metasyntactic variable
                s (after
                foo
                 and

                bar
). Competes with

```
                baz
                , which is more common outside
    PARC.
```

funky adj. Said of something that functions, but in a
    slightly strange, klugey way. It does the job and would be
    difficult to change, so its obvious non-optimality is left alone.
    Often used to describe interfaces. The more bugs something has
    that nobody has bothered to fix because workarounds are easier, the
    funkier it is.
                TECO
                 and UUCP are funky. The Intel i860's
    exception handling is extraordinarily funky. Most standards
    acquire funkiness as they age. "The new mailer is installed, but
    is still somewhat funky; if it bounces your mail for no reason, try
    resubmitting it." "This UART is pretty funky. The data ready
    line is active-high in interrupt mode and active-low in DMA mode."

funny money n. 1. Notional 'dollar' units of computing
    time and/or storage handed to students at the beginning of a
    computer course; also called 'play money' or 'purple money' (in
    implicit opposition to real or 'green' money). In New Zealand
    and Germany the odd usage 'paper money' has been recorded; in
    Germany, the particularly amusing synonym 'transfer ruble'
    commemmorates the funny money used for trade between COMECON
    countries back when the Soviet Bloc still existed. When your funny
    money ran out, your account froze and you needed to go to a
    professor to get more. Fortunately, the plunging cost of
    timesharing cycles has made this less common. The amounts
    allocated were almost invariably too small, even for the
    non-hackers who wanted to slide by with minimum work. In extreme
    cases, the practice led to small-scale black markets in bootlegged
    computer accounts. 2. By extension, phantom money or quantity
    tickets of any kind used as a resource-allocation hack within a
    system. Antonym: 'real money'.

furrfu // excl. [Usenet] Written-only equivalent of
    "Sheesh!"; it is, in fact, "sheesh" modified by
                rot13
                .
    Evolved in mid-1992 as a response to notably silly postings
    repeating urban myths on the Usenet newsgroup
    alt.folklore.urban, after some posters complained that
    "Sheesh!" as a response to
                newbie
                s was being overused. See
    also
                FOAF
                .

fuzzball n. [TCP/IP hackers] A DEC LSI-11 running a
    particular suite of homebrewed software written by Dave Mills and
    assorted co-conspirators, used in the early 1980s for Internet
    protocol testbedding and experimentation. These were used as
    NSFnet backbone sites in its early 56KB-line days; a few were still
    active on the Internet as late as mid-1993, doing odd jobs such as
    network time service.

1.12 G

                    G pref.,suff. [SI] See
                    quantifiers
                    .

g-file n. [Commodore BBS culture] Any file that is written
   with the intention of being read by a human rather than a machine,
   such as the Jargon File, documentation, humor files, hacker lore,
   and technical materials.

   This term survives from the nearly-forgotten Commodore 64
   underground and BBS community. In the early 80s, C-Net had emerged
   as the most popular C64 BBS software for systems which encouraged
   messaging (as opposed to file transfer). There were three main
   options for files: Program files (p-files), which served the same
   function as 'doors' in today's systems, UD files (the user
   upload/download section), and g-files. Anything that was meant to
   be read was included in g-files.

gabriel /gay'bree-*l/ n. [for Dick Gabriel, SAIL LISP
   hacker and volleyball fanatic] An unnecessary (in the opinion of
   the opponent) stalling tactic, e.g., tying one's shoelaces or
   combing one's hair repeatedly, asking the time, etc. Also used to
   refer to the perpetrator of such tactics. Also, 'pulling a
   Gabriel', 'Gabriel mode'.

gag vi. Equivalent to
                    choke
                    , but connotes more
   disgust. "Hey, this is FORTRAN code. No wonder the C compiler
   gagged." See also
                    barf
                    .

gang bang n. The use of large numbers of loosely coupled
   programmers in an attempt to wedge a great many features into a
   product in a short time. Though there have been memorable gang
   bangs (e.g., that over-the-weekend assembler port mentioned in
   Steven Levy's "Hackers"), most are perpetrated by large
   companies trying to meet deadlines; the inevitable result is
   enormous buggy masses of code entirely lacking in

                    orthogonal
                    ity. When market-driven managers make a list of all
   the features the competition has and assign one programmer to
   implement each, the probability of maintaining a coherent (or even
   functional) design goes infinitesimal. See also
                    firefighting
                    ,

                    Mongolian Hordes technique
                    ,

                    Conway's Law
                    .

garbage collect vi. (also 'garbage collection', n.) See

                    GC
                    .

garply /gar'plee/ n. [Stanford] Another metasyntactic
    variable (see
                    foo
                    ); once popular among SAIL hackers.

gas [as in 'gas chamber'] 1. interj. A term of disgust
    and hatred, implying that gas should be dispensed in generous
    quantities, thereby exterminating the source of irritation. "Some
    loser just reloaded the system for no reason! Gas!" 2. interj. A
    suggestion that someone or something ought to be flushed out of
    mercy. "The system's getting
                    wedged
                     every few minutes.
    Gas!" 3. vt. To
                    flush
                     (sense 1). "You should gas that old
    crufty software." 4. [IBM] n. Dead space in nonsequentially
    organized files that was occupied by data that has since been
    deleted; the compression operation that removes it is called
    'degassing' (by analogy, perhaps, with the use of the same term
    in vacuum technology). 5. [IBM] n. Empty space on a disk that has
    been clandestinely allocated against future need.

gaseous adj. Deserving of being
                    gas
                    sed. Disseminated
    by Geoff Goodfellow while at SRI; became particularly popular after
    the Moscone-Milk killings in San Francisco, when it was learned
    that the defendant Dan White (a politician who had supported
    Proposition 7) would get the gas chamber under Proposition 7 if
    convicted of first-degree murder (he was eventually convicted of
    manslaughter).

gawble n. See
                    chawmp
                    .

GC /G-C/ [from LISP terminology; 'Garbage Collect']
    1. vt. To clean up and throw away useless things. "I think I'll
    GC the top of my desk today." When said of files, this is
    equivalent to
                    GFR
                    . 2. vt. To recycle, reclaim, or put to
    another use. 3. n. An instantiation of the garbage collector
    process.

    'Garbage collection' is computer-science techspeak for a
    particular class of strategies for dynamically but transparently
    reallocating computer memory (i.e., without requiring explicit

allocation and deallocation by higher-level software). One such
strategy involves periodically scanning all the data in memory and
determining what is no longer accessible; useless data items are
then discarded so that the memory they occupy can be recycled and
used for another purpose. Implementations of the LISP language
usually use garbage collection.

In jargon, the full phrase is sometimes heard but the
                abbrev
                 is
more frequently used because it is shorter. Note that there is an
ambiguity in usage that has to be resolved by context: "I'm going
to garbage-collect my desk" usually means to clean out the
drawers, but it could also mean to throw away or recycle the desk
itself.

GCOS /jee'kohs/ n. A
                quick-and-dirty

                clone
                 of
System/360 DOS that emerged from GE around 1970; originally called
GECOS (the General Electric Comprehensive Operating System). Later
kluged to support primitive timesharing and transaction processing.
After the buyout of GE's computer division by Honeywell, the name
was changed to General Comprehensive Operating System (GCOS).
Other OS groups at Honeywell began referring to it as 'God's Chosen
Operating System', allegedly in reaction to the GCOS crowd's
uninformed and snotty attitude about the superiority of their
product. All this might be of zero interest, except for two facts:
(1) The GCOS people won the political war, and this led in the
orphaning and eventual death of Honeywell
                Multics
                , and (2)
GECOS/GCOS left one permanent mark on Unix. Some early Unix
systems at Bell Labs used GCOS machines for print spooling and
various other services; the field added to '/etc/passwd' to
carry GCOS ID information was called the 'GECOS field' and
survives today as the 'pw_gecos' member used for the user's
full name and other human-ID information. GCOS later played a
major role in keeping Honeywell a dismal also-ran in the mainframe
market, and was itself ditched for Unix in the late 1980s when
Honeywell retired its aging
                big iron
                 designs.

GECOS /jee'kohs/ n. See
                GCOS
                .

gedanken /g*-dahn'kn/ adj. Ungrounded; impractical; not
   well-thought-out; untried; untested.

   'Gedanken' is a German word for 'thought'. A thought
   experiment is one you carry out in your head. In physics, the term
   'gedanken experiment' is used to refer to an experiment that is
   impractical to carry out, but useful to consider because it can

be reasoned about theoretically. (A classic gedanken experiment of
relativity theory involves thinking about a man in an elevator
accelerating through space.) Gedanken experiments are very useful
in physics, but must be used with care. It's too easy to idealize
away some important aspect of the real world in constructing the
'apparatus'.

Among hackers, accordingly, the word has a pejorative connotation.
It is typically used of a project, especially one in artificial
intelligence research, that is written up in grand detail
(typically as a Ph.D. thesis) without ever being implemented to
any great extent. Such a project is usually perpetrated by people
who aren't very good hackers or find programming distasteful or are
just in a hurry. A 'gedanken thesis' is usually marked by an
obvious lack of intuition about what is programmable and what is
not, and about what does and does not constitute a clear
specification of an algorithm. See also
                AI-complete
                ,

                DWIM
                .

geef v. [ostensibly from 'gefingerpoken']
   vt. Syn.
                mung
                . See also
                blinkenlights
                .

geek code n. A set of codes commonly used in
                sig block
                s to
   broadcast the interests, skills, and aspirations of the poster.
   Features a G at the left margin followed by numerous letter codes,
   often suffixed with plusses or minuses. Because many net users are
   involved in computer science, the most common prefix is 'GCS'. To
   see a copy of the current Code of the Geeks, finger
   hayden@vax1.mankato.msus.edu. See also
                computer geek
                .

geek out vi. To temporarily enter techno-nerd mode while in
   a non-hackish context, for example at parties held near computer
   equipment. Especially used when you need to do or say something
   highly technical and don't have time to explain: "Pardon me while
   I geek out for a moment." See
                computer geek
                ; see also

                propeller head
                .

gen /jen/ n.,v. Short for
                generate
                , used frequently
   in both spoken and written contexts.

gender mender n. A cable connector shell with either two
   male or two female connectors on it, used to correct the mismatches
   that result when some
                 loser
                  didn't understand the RS232C
   specification and the distinction between DTE and DCE. Used
   esp. for RS-232C parts in either the original D-25 or the IBM
   PC's bogus D-9 format. Also called 'gender bender', 'gender
   blender', 'sex changer', and even 'homosexual adapter';
   however, there appears to be some confusion as to whether a 'male
   homosexual adapter' has pins on both sides (is doubly male) or
   sockets on both sides (connects two males).

General Public Virus n. Pejorative name for some versions
   of the
                 GNU
                  project
                 copyleft
                  or General Public License
   (GPL), which requires that any tools or
                 app
                 s incorporating
   copylefted code must be source-distributed on the same
   counter-commercial terms as GNU stuff. Thus it is alleged that the
   copyleft 'infects' software generated with GNU tools, which may
   in turn infect other software that reuses any of its code. The
   Free Software Foundation's official position as of January 1991 is
   that copyright law limits the scope of the GPL to "programs
   textually incorporating significant amounts of GNU code", and that
   the 'infection' is not passed on to third parties unless actual
   GNU source is transmitted (as in, for example, use of the Bison
   parser skeleton). Nevertheless, widespread suspicion that the

                 copyleft
                  language is 'boobytrapped' has caused many
   developers to avoid using GNU tools and the GPL. Recent (July
   1991) changes in the language of the version 2.00 license may
   eliminate this problem.

generate vt. To produce something according to an algorithm
   or program or set of rules, or as a (possibly unintended) side
   effect of the execution of an algorithm or program. The opposite
   of
                 parse
                 . This term retains its mechanistic connotations
   (though often humorously) when used of human behavior. "The guy
   is rational most of the time, but mention nuclear energy around him
   and he'll generate
                 infinite
                  flamage."

Genius From Mars Technique n. [TMRC] A visionary quality
   which enables one to ignore the standard approach and come up with
   a totally unexpected new algorithm. An attack on a problem from an
   offbeat angle that no one has ever thought of before, but that in
   retrospect makes total sense. Compare

            grok
            ,
            zen
            .

gensym /jen'sim/ [from MacLISP for 'generated symbol']
    1. v. To invent a new name for something temporary, in such a way
    that the name is almost certainly not in conflict with one already
    in use. 2. n. The resulting name. The canonical form of a gensym
    is 'Gnnnn' where nnnn represents a number; any LISP hacker would
    recognize G0093 (for example) as a gensym. 3. A freshly generated
    data structure with a gensymmed name. Gensymmed names are useful
    for storing or uniquely identifying crufties (see
            cruft
).

Get a life! imp. Hacker-standard way of suggesting that the
    person to whom it is directed has succumbed to terminal geekdom
    (see
            computer geek
). Often heard on
            Usenet
            , esp. as a
    way of suggesting that the target is taking some obscure issue of

            theology
             too seriously. This exhortation was popularized by
    William Shatner on a "Saturday Night Live" episode in a
    speech that ended "Get a *life*!", but some respondents
    believe it to have been in use before then. It was certainly in
    wide use among hackers for at least five years before achieving
    mainstream currency in early 1992.

Get a real computer! imp. Typical hacker response to news
    that somebody is having trouble getting work done on a system that
    (a) is single-tasking, (b) has no hard disk, or (c) has an address
    space smaller than 16 megabytes. This is as of early 1996; note
    that the threshold for 'real computer' rises with time. See

            bitty box
             and
            toy
            .

GFR /G-F-R/ vt. [ITS: from 'Grim File Reaper', an ITS and
    LISP Machine utility] To remove a file or files according to some
    program-automated or semi-automatic manual procedure, especially
    one designed to reclaim mass storage space or reduce name-space
    clutter (the original GFR actually moved files to tape). Often
    generalized to pieces of data below file level. "I used to have
    his phone number, but I guess I
            GFR
            ed it." See also

            prowler
            ,
            reaper

```
                      .   Compare
                  GC
                  , which discards only
      provably worthless stuff.

GIFs at 11   [Fidonet] Fidonet alternative to
                  film at 11
                  ,
      especially in echoes (Fidonet topic areas) where UUencoded
      GIFs are permitted.  Other formats, especially JPEG and MPEG,
      may be referenced instead.

gig /jig/ or /gig/ n.   [SI] See
                  quantifiers
                  .

giga- /ji'ga/ or /gi'ga/ pref.  [SI] See

                  quantifiers
                  .

GIGO /gi:'goh/ [acronym]  1. 'Garbage In, Garbage Out' ---
      usually said in response to
                  luser
                  s who complain that a program
      didn't "do the right thing" when given imperfect input or
      otherwise mistreated in some way.  Also commonly used to describe
      failures in human decision making due to faulty, incomplete, or
      imprecise data.  2. 'Garbage In, Gospel Out': this more recent
      expansion is a sardonic comment on the tendency human beings have
      to put excessive trust in 'computerized' data.

gilley n.  [Usenet] The unit of analogical bogosity.
      According to its originator, the standard for one gilley was "the
      act of bogotoficiously comparing the shutting down of 1000 machines
      for a day with the killing of one person".  The milligilley has
      been found to suffice for most normal conversational exchanges.

gillion /gil'y*n/ or /jil'y*n/ n.  [formed from

                  giga-
                   by analogy with mega/million and tera/trillion]
      10^9. Same as an American billion or a British 'milliard'.
      How one pronounces this depends on whether one speaks
                  giga-
                     with a hard or soft 'g'.

GIPS /gips/ or /jips/ n.  [analogy with
                  MIPS
                  ]
      Giga-Instructions per Second (also possibly 'Gillions of
      Instructions per Second'; see
                  gillion
                  ).  In 1991, this is used
      of only a handful of highly parallel machines, but this is expected
      to change.  Compare
                  KIPS
```

.

glark /glark/ vt. To figure something out from context.
   "The System III manuals are pretty poor, but you can generally
   glark the meaning from context." Interestingly, the word was
   originally 'glork'; the context was "This gubblick contains many
   nonsklarkish English flutzpahs, but the overall pluggandisp can be
   glorked [sic] from context" (David Moser, quoted by Douglas
   Hofstadter in his "Metamagical Themas" column in the January
   1981 "Scientific American"). It is conjectured that hackish
   usage mutated the verb to 'glark' because
                glork
                 was already
   an established jargon term. Compare
                grok
                ,
                zen
                .

glass n.   [IBM] Synonym for
                silicon
                .

glass tty /glas T-T-Y/ or /glas ti'tee/ n. A terminal
   that has a display screen but which, because of hardware or
   software limitations, behaves like a teletype or some other
   printing terminal, thereby combining the disadvantages of both:
   like a printing terminal, it can't do fancy display hacks, and like
   a display terminal, it doesn't produce hard copy. An example is
   the early 'dumb' version of Lear-Siegler ADM 3 (without cursor
   control). See
                tube
                ,
                tty
                ; compare
                dumb terminal
                ,

                smart terminal
                . See "
                TV Typewriters
                " (Appendix
   A) for an interesting true story about a glass tty.

glassfet /glas'fet/ n. [by analogy with MOSFET, the
   acronym for 'Metal-Oxide-Semiconductor Field-Effect Transistor']
   Syn.
                firebottle
                , a humorous way to refer to a vacuum tube.

glitch /glich/ [from German 'glitzschig' to slip, via
   Yiddish 'glitshen', to slide or skid] 1. n. A sudden interruption
   in electric service, sanity, continuity, or program function.
   Sometimes recoverable. An interruption in electric service is
   specifically called a 'power glitch' (also
                power hit
                ), of

grave concern because it usually crashes all the computers. In
jargon, though, a hacker who got to the middle of a sentence and
then forgot how he or she intended to complete it might say,
"Sorry, I just glitched". 2. vi. To commit a glitch. See

          gritch
          . 3. vt. [Stanford] To scroll a display screen, esp.
several lines at a time.
          WAITS
           terminals used to do this in
order to avoid continuous scrolling, which is distracting to the
eye. 4. obs. Same as
          magic cookie
          , sense 2.

All these uses of 'glitch' derive from the specific technical
meaning the term has in the electronic hardware world, where it is
now techspeak. A glitch can occur when the inputs of a circuit
change, and the outputs change to some
          random
           value for some
very brief time before they settle down to the correct value. If
another circuit inspects the output at just the wrong time, reading
the random value, the results can be very wrong and very hard to
debug (a glitch is one of many causes of electronic
          heisenbug
          s).

glob /glob/, *not* /glohb/ vt.,n.   [Unix] To expand
   special characters in a wildcarded name, or the act of so doing
   (the action is also called 'globbing'). The Unix conventions for
   filename wildcarding have become sufficiently pervasive that many
   hackers use some of them in written English, especially in email or
   news on technical topics. Those commonly encountered include the
   following:

     *
          wildcard for any string (see also
                UN*X
)

     ?
          wildcard for any single character (generally read this way
          only at the beginning or in the middle of a word)

     []
          delimits a wildcard matching any of the enclosed characters

     {}
          alternation of comma-separated alternatives; thus,
          'foo{baz,qux}' would be read as 'foobaz' or 'fooqux'

   Some examples: "He said his name was [KC]arl" (expresses
   ambiguity). "I don't read talk.politics.*" (any of the
   talk.politics subgroups on
                Usenet
). Other examples are given

under the entry for
                X
                . Note that glob patterns are similar,
    but not identical, to those used in
                regexp
                s.

    Historical note: The jargon usage derives from 'glob', the
    name of a subprogram that expanded wildcards in archaic pre-Bourne
    versions of the Unix shell.

glork /glork/ 1. interj. Term of mild surprise, usually
    tinged with outrage, as when one attempts to save the results of
    two hours of editing and finds that the system has just crashed.
    2. Used as a name for just about anything. See
                foo
                .
    3. vt. Similar to
                glitch
                , but usually used reflexively. "My
    program just glorked itself." See also
                glark
                .

glue n. Generic term for any interface logic or protocol
    that connects two component blocks. For example,
                Blue Glue
                 is
    IBM's SNA protocol, and hardware designers call anything used to
    connect large VLSI's or circuit blocks 'glue logic'.

gnarly /nar'lee/ adj. Both
                obscure
                 and
                hairy
                   (sense 1). "
                Yow!
                 -- the tuned assembler implementation of
    BitBlt is really gnarly!" From a similar but less specific usage
    in surfer slang.

GNU /gnoo/, *not* /noo/ 1. [acronym: 'GNU's Not
    Unix!', see
                recursive acronym
                ] A Unix-workalike development
    effort of the Free Software Foundation headed by Richard Stallman
    <rms@gnu.ai.mit.edu>. GNU EMACS and the GNU C compiler, two
    tools designed for this project, have become very popular in
    hackerdom and elsewhere. The GNU project was designed partly to
    proselytize for RMS's position that information is community
    property and all software source should be shared. One of its
    slogans is "Help stamp out software hoarding!" Though this
    remains controversial (because it implicitly denies any right of
    designers to own, assign, and sell the results of their labors),
    many hackers who disagree with RMS have nevertheless cooperated to
    produce large amounts of high-quality software for free
    redistribution under the Free Software Foundation's imprimatur.

    See

                EMACS
                ,
                copyleft
                ,
                General Public Virus
                ,

                Linux
                . 2. Noted Unix hacker John Gilmore <gnu@toad.com>,
    founder of Usenet's anarchic alt.* hierarchy.

GNUMACS /gnoo'maks/ n. [contraction of 'GNU EMACS']
    Often-heard abbreviated name for the
                GNU
                 project's flagship
    tool,
                EMACS
                . Used esp. in contrast with
                GOSMACS
                .

go flatline v. [from cyberpunk SF, refers to flattening of
    EEG traces upon brain-death] (also adjectival 'flatlined'). 1. To

                die
                , terminate, or fail, esp. irreversibly. In hacker
    parlance, this is used of machines only, human death being
    considered somewhat too serious a matter to employ jargon-jokes
    about. 2. To go completely quiescent; said of machines undergoing
    controlled shutdown. "You can suffer file damage if you shut down
    Unix but power off before the system has gone flatline." 3. Of a
    video tube, to fail by losing vertical scan, so all one sees is a
    bright horizontal line bisecting the screen.

go root vi. [Unix] To temporarily enter
                root mode
                 in
    order to perform a privileged operation. This use is deprecated in
    Australia, where v. 'root' refers to animal sex.

go-faster stripes [UK] Syn.
                chrome
                . Mainstream in
    some parts of UK. .

gobble vt. 1. To consume, usu. used with 'up'. "The
    output spy gobbles characters out of a
                tty
                 output buffer."
    2. To obtain, usu. used with 'down'. "I guess I'll gobble down
    a copy of the documentation tomorrow." See also
                snarf
                .

Godwin's Law prov. [Usenet] "As a Usenet discussion grows
    longer, the probability of a comparison involving Nazis or Hitler

approaches one." There is a tradition in many groups that, once
this occurs, that thread is over, and whoever mentioned the Nazis
has automatically lost whatever argument was in progress. Godwin's
Law thus guarantees the existence of an upper bound on thread
length in those groups.

Godzillagram /god-zil'*-gram/ n. [from Japan's national
hero] 1. A network packet that in theory is a broadcast to every
machine in the universe. The typical case is an IP datagram whose
destination IP address is [255.255.255.255]. Fortunately, few
gateways are foolish enough to attempt to implement this case!
2. A network packet of maximum size. An IP Godzillagram has 65,536
octets. Compare
            super source quench
            .

golden adj. [prob. from folklore's 'golden egg'] When
used to describe a magnetic medium (e.g., 'golden disk',
'golden tape'), describes one containing a tested, up-to-spec,
ready-to-ship software version. Compare
            platinum-iridium
            .

golf-ball printer n. The IBM 2741, a slow but
letter-quality printing device and terminal based on the IBM
Selectric typewriter. The 'golf ball' was a little spherical
frob bearing reversed embossed images of 88 different characters
arranged on four parallels of latitude; one could change the font
by swapping in a different golf ball. This was the technology that
enabled APL to use a non-EBCDIC, non-ASCII, and in fact completely
non-standard character set. This put it 10 years ahead of its time
-- where it stayed, firmly rooted, for the next 20, until
character displays gave way to programmable bit-mapped devices with
the flexibility to support other character sets.

gonk /gonk/ vt.,n. 1. To prevaricate or to embellish the
truth beyond any reasonable recognition. In German the term is
(mythically) 'gonken'; in Spanish the verb becomes 'gonkar'.
"You're gonking me. That story you just told me is a bunch of
gonk." In German, for example, "Du gonkst mir" (You're pulling
my leg). See also
            gonkulator
            . 2. [British] To grab some
sleep at an odd time; compare
            gronk out
            .

gonkulator /gon'kyoo-lay-tr/ n. [from the old
"Hogan's Heroes" TV series] A pretentious piece of equipment
that actually serves no useful purpose. Usually used to describe
one's least favorite piece of computer hardware. See
            gonk
            .

gonzo /gon'zoh/ adj. [from Hunter S. Thompson]
Overwhelming; outrageous; over the top; very large, esp. used of
collections of source code, source files, or individual functions.

Has some of the connotations of
                moby
                 and
                hairy
                , but
    without the implication of obscurity or complexity.

Good Thing n.,adj. Often capitalized; always pronounced as
    if capitalized. 1. Self-evidently wonderful to anyone in a
    position to notice: "The Trailblazer's 19.2Kbaud PEP mode with
    on-the-fly Lempel-Ziv compression is a Good Thing for sites
    relaying netnews." 2. Something that can't possibly have any ill
    side-effects and may save considerable grief later: "Removing the
    self-modifying code from that shared library would be a Good
    Thing." 3. When said of software tools or libraries, as in "YACC
    is a Good Thing", specifically connotes that the thing has
    drastically reduced a programmer's work load. Oppose
                Bad Thing
                .

gopher n. A type of Internet service first floated around
    1991 and now (1994) being obsolesced by the World Wide Web. Gopher
    presents a menuing interface to a tree or graph of links;
    the links can be to documents, runnable programs, or other gopher
    menus arbitrarily far across the net.

    Some claim that the gopher software, which was originally developed
    at the University of Minnesota, was named after the Minnesota
    Gophers (a sports team). Others claim the word derives from
    American slang 'gofer' (from "go for", dialectical "go fer"),
    one whose job is to run and fetch things. Finally, observe that
    gophers (aka woodchucks) dig long tunnels, and the idea of
    tunneling through the net to find information was a defining
    metaphor for the developers. Probably all three things were true,
    but with the first two coming first and the gopher-tunnel metaphor
    serendipitously adding flavor and impetus to the project as it
    developed out of its concept stage.

gopher hole n. 1. Any access to a
                gopher
                . 2. [Amateur
    Packet Radio] The terrestrial analogue of a
                wormhole
                 (sense
    2), from which this term was coined. A gopher hole links two
    amateur packet relays through some non-ham radio medium.

gorets /gor'ets/ n. The unknown ur-noun, fill in your own
    meaning. Found esp. on the Usenet newsgroup alt.gorets, which
    seems to be a running contest to redefine the word by implication
    in the funniest and most peculiar way, with the understanding that
    no definition is ever final. [A correspondent from the Former
    Soviet Union informs me that 'gorets' is Russian for 'mountain
    dweller' -- ESR] Compare
                frink
                .

gorilla arm n. The side-effect that destroyed touch-screens
   as a mainstream input technology despite a promising start in the
   early 1980s. It seems the designers of all those
                spiffy
                   touch-menu systems failed to notice that humans aren't designed ←
                      to
   hold their arms in front of their faces making small motions.
   After more than a very few selections, the arm begins to feel sore,
   cramped, and oversized -- the operator looks like a gorilla while
   using the touch screen and feels like one afterwards. This is now
   considered a classic cautionary tale to human-factors designers;
   "Remember the gorilla arm!" is shorthand for "How is this going
   to fly in *real* use?".

gorp /gorp/ [CMU: perhaps from the canonical hiker's
   food, Good Old Raisins and Peanuts] Another
                metasyntactic variable
                ,
   like
                foo
                 and
                bar
                .

GOSMACS /goz'maks/ n. [contraction of `Gosling EMACS']
   The first
                EMACS
                -in-C implementation, predating but now
   largely eclipsed by
                GNUMACS
                . Originally freeware; a
   commercial version is now modestly popular as `UniPress EMACS'.
   The author (James Gosling) went on to invent
                NeWS
                 and the
   programming language Java.

Gosperism /gos'p*r-izm/ n. A hack, invention, or saying
   due to arch-hacker R. William (Bill) Gosper. This notion merits
   its own term because there are so many of them. Many of the
   entries in
                HAKMEM
                 are Gosperisms; see also
                life
                .

gotcha n. A
                misfeature
                 of a system, especially a
   programming language or environment, that tends to breed bugs or
   mistakes because it both enticingly easy to invoke and completely
   unexpected and/or unreasonable in its outcome. For example, a
   classic gotcha in
                C
                 is the fact that `if (a=b) {code;}'
   is syntactically valid and sometimes even correct. It puts the
   value of `b' into `a' and then executes `code' if

```
     'a' is non-zero.  What the programmer probably meant was
     'if (a==b) {code;}', which executes 'code' if 'a'
     and 'b' are equal.
```

GPL /G-P-L/ n. Abbreviation for 'General Public
   License' in widespread use; see

                copyleft
                ,
                General Public Virus
                .

GPV /G-P-V/ n. Abbrev. for
                General Public Virus
                 in
   widespread use.

grault /grawlt/ n. Yet another
                metasyntactic variable
                ,
   invented by Mike Gallaher and propagated by the

                GOSMACS
                 documentation. See
                corge
                .

gray goo n. A hypothetical substance composed of

                sagan
                s of sub-micron-sized self-replicating robots programmed
   to make copies of themselves out of whatever is available. The
   image that goes with the term is one of the entire biosphere of
   Earth being eventually converted to robot goo. This is the
   simplest of the
                nanotechnology
                 disaster scenarios, easily
   refuted by arguments from energy requirements and elemental
   abundances. Compare
                blue goo
                .

Great Renaming n. The
                flag day
                 in 1985 on which all of
   the non-local groups on the
                Usenet
                 had their names changed
   from the net.- format to the current multiple-hierarchies scheme.
   Used esp. in discussing the history of newsgroup names. "The
   oldest sources group is comp.sources.misc; before the Great
   Renaming, it was net.sources."

Great Runes n. Uppercase-only text or display messages.
   Some archaic operating systems still emit these. See also

                runes
                ,

```
                  smash case
                  ,
                  fold case
                  .
```

Decades ago, back in the days when it was the sole supplier of
long-distance hardcopy transmittal devices, the Teletype
Corporation was faced with a major design choice. To shorten code
lengths and cut complexity in the printing mechanism, it had been
decided that teletypes would use a monocase font, either ALL UPPER
or all lower. The Question Of The Day was therefore, which one to
choose. A study was conducted on readability under various
conditions of bad ribbon, worn print hammers, etc. Lowercase won;
it is less dense and has more distinctive letterforms, and is thus
much easier to read both under ideal conditions and when the
letters are mangled or partly obscured. The results were filtered
up through
                  management
                  . The chairman of Teletype killed the
proposal because it failed one incredibly important criterion:

      "It would be impossible to spell the name of the Deity
      correctly."

In this way (or so, at least, hacker folklore has it) superstition
triumphed over utility. Teletypes were the major input devices on
most early computers, and terminal manufacturers looking for
corners to cut naturally followed suit until well into the 1970s.
Thus, that one bad call stuck us with Great Runes for thirty years.

Great Worm, the n. The 1988 Internet
                  worm
                   perpetrated
      by
                  RTM
                  . This is a play on Tolkien (compare
                  elvish
                  ,
                  elder days
). In the fantasy history of his Middle Earth
      books, there were dragons powerful enough to lay waste to entire
      regions; two of these (Scatha and Glaurung) were known as "the
      Great Worms". This usage expresses the connotation that the RTM
      hack was a sort of devastating watershed event in hackish history;
      certainly it did more to make non-hackers nervous about the
      Internet than anything before or since.

great-wall vi.,n. [from SF fandom] A mass expedition to an
      oriental restaurant, esp. one where food is served family-style
      and shared. There is a common heuristic about the amount of food
      to order, expressed as "Get N - 1 entrees"; the value of
      N, which is the number of people in the group, can be
      inferred from context (see
                  N
). See
                  oriental food
```

                ,
                ravs
                ,
                stir-fried random
                .

Green Book n.   1. One of the three standard
                PostScript
                  references: "PostScript Language Program Design", bylined
    'Adobe Systems' (Addison-Wesley, 1988; QA76.73.P67P66 ISBN
    0-201-14396-8); see also
                Red Book
                ,
                Blue Book
                , and the

                White Book
                 (sense 2).  2. Informal name for one of the three
    standard references on SmallTalk: "Smalltalk-80: Bits of
    History, Words of Advice", by Glenn Krasner (Addison-Wesley, 1983;
    QA76.8.S635S58; ISBN 0-201-11669-3) (this, too, is associated with
    blue and red books).  3. The "X/Open Compatibility Guide",
    which defines an international standard
                Unix
                 environment that
    is a proper superset of POSIX/SVID; also includes descriptions of a
    standard utility toolkit, systems administrations features, and the
    like.  This grimoire is taken with particular seriousness in
    Europe.  See
                Purple Book
                . 4. The IEEE 1003.1 POSIX Operating
    Systems Interface standard has been dubbed "The Ugly Green Book".
    5. Any of the 1992 standards issued by the CCITT's tenth plenary
    assembly.  These include, among other things, the X.400 email
    standard and the Group 1 through 4 fax standards.  See also

                book titles
                .

green bytes n.  (also 'green words') 1. Meta-information
    embedded in a file, such as the length of the file or its name; as
    opposed to keeping such information in a separate description file
    or record.  The term comes from an IBM user's group meeting
    (ca. 1962) at which these two approaches were being debated and the
    diagram of the file on the blackboard had the 'green bytes' drawn
    in green.  2. By extension, the non-data bits in any
    self-describing format.  "A GIF file contains, among other things,
    green bytes describing the packing method for the image." Compare

                out-of-band
                ,
                zigamorph
                ,
                fence
                 (sense 1).

green card n.   [after the "IBM System/360 Reference
   Data" card] A summary of an assembly language, even if the color is
   not green.  Less frequently used now because of the decrease in the
   use of assembly language.  "I'll go get my green card so I can
   check the addressing mode for that instruction."  Some green cards
   are actually booklets.

   The original green card became a yellow card when the System/370
   was introduced, and later a yellow booklet.  An anecdote from IBM
   refers to a scene that took place in a programmers' terminal room
   at Yorktown in 1978.  A
                   luser
                    overheard one of the programmers
   ask another "Do you have a green card?"  The other grunted and
   passed the first a thick yellow booklet.  At this point the luser
   turned a delicate shade of olive and rapidly left the room, never
   to return.

green lightning n.   [IBM] 1. Apparently random flashing
   streaks on the face of 3278-9 terminals while a new symbol set is
   being downloaded.  This hardware bug was left deliberately unfixed,
   as some genius within IBM suggested it would let the user know that
   'something is happening'.  That, it certainly does.  Later
   microprocessor-driven IBM color graphics displays were actually
   *programmed* to produce green lightning!  2. [proposed] Any
   bug perverted into an alleged feature by adroit rationalization or
   marketing.  "Motorola calls the CISC cruft in the 88000
   architecture 'compatibility logic', but I call it green
   lightning".  See also
                   feature
                    (sense 6).

green machine n.  A computer or peripheral device that has
   been designed and built to military specifications for field
   equipment (that is, to withstand mechanical shock, extremes of
   temperature and humidity, and so forth).  Comes from the olive-drab
   'uniform' paint used for military equipment.

Green's Theorem prov.  [TMRC] For any story, in any group of
   people there will be at least one person who has not heard the
   story.  A refinement of the theorem states that there will be
   *exactly* one person (if there were more than one, it wouldn't be
   as bad to re-tell the story).  [The name of this theorem is a play
   on a fundamental theorem in calculus. -- ESR]

grep /grep/ vt.   [from the qed/ed editor idiom g/re/p
   , where re stands for a regular expression, to Globally search
   for the Regular Expression and Print the lines containing matches
   to it, via
                   Unix
                    'grep(1)'] To rapidly scan a file or set
   of files looking for a particular string or pattern (when browsing
   through a large set of files, one may speak of 'grepping
   around').  By extension, to look for something by pattern.  "Grep
   the bulletin board for the system backup schedule, would you?"
   See also
                   vgrep

.

grilf // n.  Girl-friend.  Like

           newsfroup
            and

           filk
           , a typo reincarnated as a new word.  Seems to have
originated sometime in 1992.

grind vt.  1. [MIT and Berkeley] To prettify hardcopy of
code, especially LISP code, by reindenting lines, printing keywords
and comments in distinct fonts (if available), etc.  This usage was
associated with the MacLISP community and is now rare;

           prettyprint
           was and is the generic term for such
operations.  2. [Unix] To generate the formatted version of a
document from the
           nroff
           ,
           troff
           ,
           TeX
           , or Scribe
source.  3. To run seemingly interminably, esp. (but not
necessarily) if performing some tedious and inherently useless
task.  Similar to
           crunch
           or
           grovel
           . Grinding has a
connotation of using a lot of CPU time, but it is possible to grind
a disk, network, etc.  See also
           hog
           . 4. To make the whole
system slow.  "Troff really grinds a PDP-11."  5. 'grind grind'
excl. Roughly, "Isn't the machine slow today!"

grind crank n.   A mythical accessory to a terminal.  A
crank on the side of a monitor, which when operated makes a zizzing
noise and causes the computer to run faster.  Usually one does not
refer to a grind crank out loud, but merely makes the appropriate
gesture and noise.  See
           grind
           and
           wugga wugga

           .

Historical note: At least one real machine actually had a grind
crank -- the R1, a research machine built toward the end of the
days of the great vacuum tube computers, in 1959.  R1 (also known
as 'The Rice Institute Computer' (TRIC) and later as 'The Rice
University Computer' (TRUC)) had a single-step/free-run switch for
use when debugging programs.  Since single-stepping through a large
program was rather tedious, there was also a crank with a cam and
gear arrangement that repeatedly pushed the single-step button.

This allowed one to 'crank' through a lot of code, then slow
down to single-step for a bit when you got near the code of
interest, poke at some registers using the console typewriter, and
then keep on cranking.

gripenet n.   [IBM] A wry (and thoroughly unofficial) name
   for IBM's internal VNET system, deriving from its common use by
   IBMers to voice pointed criticism of IBM management that would be
   taboo in more formal channels.

gritch /grich/  [MIT] 1. n. A complaint (often caused by a

               glitch
               ).  2. vi. To complain.  Often verb-doubled: "Gritch
   gritch".   3. A synonym for
               glitch
                 (as verb or noun).

   Interestingly, this word seems to have a separate history from

               glitch
               , with which it is often confused.  Back in the early
   1960s, when 'glitch' was strictly a hardware-tech's term of art,
   the Burton House dorm at M.I.T. maintained a "Gritch Book", a
   blank volume, into which the residents hand-wrote complaints,
   suggestions, and witticisms.  Previous years' volumes of this
   tradition were maintained, dating back to antiquity.  The word
   "gritch" was described as a portmanteau of "gripe" and
   "bitch".  Thus, sense 3 above is at least historically incorrect.


grok /grok/, var. /grohk/ vt.  [from the novel
   "Stranger in a Strange Land", by Robert A. Heinlein, where it
   is a Martian word meaning literally 'to drink' and metaphorically
   'to be one with'] The emphatic form is 'grok in
   fullness'. 1. To understand, usually in a global sense.  Connotes
   intimate and exhaustive knowledge.  Contrast
               zen
               , which is
   similar supernal understanding experienced as a single brief flash.
   See also
               glark
               .  2. Used of programs, may connote merely
   sufficient understanding.  "Almost all C compilers grok the
   'void' type these days."

gronk /gronk/ vt.  [popularized by Johnny Hart's comic
   strip "B.C." but the word apparently predates that] 1. To
   clear the state of a wedged device and restart it.  More severe
   than 'to
               frob
               ' (sense 2).  2. [TMRC] To cut, sever, smash,
   or similarly disable.  3. The sound made by many 3.5-inch diskette
   drives.  In particular, the microfloppies on a Commodore Amiga go
   "grink, gronk".

gronk out vi.  To cease functioning.  Of people, to go home

and go to sleep.  "I guess I'll gronk out now; see you all
tomorrow."

gronked adj.  1. Broken.  "The teletype scanner was
    gronked, so we took the system down."  2. Of people, the condition
    of feeling very tired or (less commonly) sick.  "I've been chasing
    that bug for 17 hours now and I am thoroughly gronked!"  Compare

                broken
                , which means about the same as
                gronk
                 used of
    hardware, but connotes depression or mental/emotional problems in
    people.

grovel vi.  1. To work interminably and without apparent
    progress.  Often used transitively with 'over' or 'through'.
    "The file scavenger has been groveling through the /usr
    directories for 10 minutes now."  Compare
                grind
                 and

                crunch
                .  Emphatic form: 'grovel obscenely'.  2. To examine
    minutely or in complete detail.  "The compiler grovels over the
    entire source program before beginning to translate it."  "I
    grovelled through all the documentation, but I still couldn't find
    the command I wanted."

grunge /gruhnj/ n.  1. That which is grungy, or that which
    makes it so.  2. [Cambridge] Code which is inaccessible due to
    changes in other parts of the program.  The preferred term in North
    America is
                dead code
                .

gubbish /guhb'*sh/ n.  [a portmanteau of 'garbage' and
    'rubbish'; may have originated with SF author Philip K. Dick]
    Garbage; crap; nonsense.  "What is all this gubbish?"  The
    opposite portmanteau 'rubbage' is also reported.

guiltware /gilt'weir/ n.  1. A piece of
                freeware
                    decorated with a message telling one how long and hard the  ←
                     author
    worked on it and intimating that one is a no-good freeloader if one
    does not immediately send the poor suffering martyr gobs of money.
    2. A piece of
                shareware
                 that works.

gumby /guhm'bee/ n.  [from a class of Monty Python
    characters, poss. with some influence from the 1960s claymation
    character] An act of minor but conspicuous stupidity, often in
    'gumby maneuver' or 'pull a gumby'.  2. [NRL] n. A bureaucrat,
    or other technical incompetent who impedes the progress of real
    work.  3. adj. Relating to things typically associated with people

in sense 2.  (e.g.  "Ran would be writing code, but Richard gave
him gumby work that's due on Friday", or, "Dammit!  Travel
screwed up my plane tickets.  I have to go out on gumby patrol.")

gun vt.  [ITS: from the ':GUN' command] To forcibly
terminate a program or job (computer, not career).  "Some idiot
left a background process running soaking up half the cycles, so I
gunned it."  Usage: now rare.  Compare
                can
                ,
                blammo
                .

gunch /guhnch/ vt.  [TMRC] To push, prod, or poke at a
device that has almost (but not quite) produced the desired result.
Implies a threat to
                mung
                .

gurfle /ger'fl/ interj.  An expression of shocked
disbelief.  "He said we have to recode this thing in FORTRAN by
next week.  Gurfle!"  Compare
                weeble
                .

guru n.  [Unix] An expert.  Implies not only
                wizard
                    skill but also a history of being a knowledge resource for  ←
                        others.
Less often, used (with a qualifier) for other experts on other
systems, as in 'VMS guru'.  See
                source of all good bits
                .

guru meditation n.  Amiga equivalent of 'panic' in Unix
(sometimes just called a 'guru' or 'guru event').  When the
system crashes, a cryptic message of the form "GURU MEDITATION
#XXXXXXXX.YYYYYYYY" may appear, indicating what the problem was.
An Amiga guru can figure things out from the numbers.  Sometimes a

                guru
                 event must be followed by a
                Vulcan nerve pinch
                .

This term is (no surprise) an in-joke from the earliest days of the
Amiga.  There used to be a device called a 'Joyboard' which was
basically a plastic board built onto a joystick-like device; it was
sold with a skiing game cartridge for the Atari game machine.  It
is said that whenever the prototype OS crashed, the system
programmer responsible would calm down by concentrating on a
solution while sitting cross-legged on a Joyboard trying to keep
the board in balance.  This position resembled that of a meditating
guru.  Sadly, the joke was removed in AmigaOS 2.04 (actually in
2.00, a buggy post-2.0 release on the A3000 only).

gweep /gweep/  [WPI] 1. v. To

```
            hack
            , usually at night.
   At WPI, from 1977 onwards, one who gweeped coud often be found at
   the College Computing Center punching cards or crashing the

            PDP-10
             or, later, the DEC-20.  The term has survived the demise
   of those technologies, however, and was still alive in late 1991.
   "I'm going to go gweep for a while.  See you in the morning." "I
   gweep from 8 PM till 3 AM during the week."  2. n. One who
   habitually gweeps in sense 1; a
            hacker
            .  "He's a hard-core
   gweep, mumbles code in his sleep."
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1.13   H

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            h   [from SF fandom] A method of 'marking' common words,
   i.e., calling attention to the fact that they are being used in a
   nonstandard, ironic, or humorous way.  Originated in the fannish
   catchphrase "Bheer is the One True Ghod!" from decades ago.
   H-infix marking of 'Ghod' and other words spread into the 1960s
   counterculture via underground comix, and into early hackerdom
   either from the counterculture or from SF fandom (the three
   overlapped heavily at the time).  More recently, the h infix has
   become an expected feature of benchmark names (Dhrystone,
   Rhealstone, etc.); this is prob. patterning on the original
   Whetstone (the name of a laboratory) but influenced by the
   fannish/counterculture h infix.

ha ha only serious   [from SF fandom, orig. as mutation of
   HHOK, 'Ha Ha Only Kidding'] A phrase (often seen abbreviated as
   HHOS) that aptly captures the flavor of much hacker discourse.
   Applied especially to parodies, absurdities, and ironic jokes that
   are both intended and perceived to contain a possibly disquieting
   amount of truth, or truths that are constructed on in-joke and
   self-parody.  This lexicon contains many examples of
   ha-ha-only-serious in both form and content.  Indeed, the entirety
   of hacker culture is often perceived as ha-ha-only-serious by
   hackers themselves; to take it either too lightly or too seriously
   marks a person as an outsider, a
            wannabee
            , or in
            larval stage
            .
   For further enlightenment on this subject, consult any Zen
   master.  See also
            Humor, Hacker
            , and
            AI koans
            .

hack  1. n. Originally, a quick job that produces what is
   needed, but not well.  2. n. An incredibly good, and perhaps very
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time-consuming, piece of work that produces exactly what is needed.
3. vt. To bear emotionally or physically. "I can't hack this
heat!" 4. vt. To work on something (typically a program). In an
immediate sense: "What are you doing?" "I'm hacking TECO."
In a general (time-extended) sense: "What do you do around here?"
"I hack TECO." More generally, "I hack 'foo'" is roughly
equivalent to "'foo' is my major interest (or project)". "I
hack solid-state physics." See
                Hacking X for Y
                . 5. vt. To
pull a prank on. See sense 2 and
                hacker
                 (sense 5). 6. vi. To
interact with a computer in a playful and exploratory rather than
goal-directed way. "Whatcha up to?" "Oh, just hacking."
7. n. Short for
                hacker
                . 8. See
                nethack
                . 9. [MIT] v. To
explore the basements, roof ledges, and steam tunnels of a large,
institutional building, to the dismay of Physical Plant workers and
(since this is usually performed at educational institutions) the
Campus Police. This activity has been found to be eerily similar
to playing adventure games such as Dungeons and Dragons and

                Zork
                . See also
                vadding
                .

Constructions on this term abound. They include 'happy hacking'
(a farewell), 'how's hacking?' (a friendly greeting among
hackers) and 'hack, hack' (a fairly content-free but friendly
comment, often used as a temporary farewell). For more on this
totipotent term see "
                The Meaning of 'Hack'
                ". See
also
                neat hack
                ,
                real hack
                .

hack attack n. [poss. by analogy with 'Big Mac Attack'
   from ads for the McDonald's fast-food chain; the variant 'big
   hack attack' is reported] Nearly synonymous with
                hacking run
                ,
   though the latter more strongly implies an all-nighter.

hack mode n. 1. What one is in when hacking, of course.
   2. More specifically, a Zen-like state of total focus on The
   Problem that may be achieved when one is hacking (this is why every
   good hacker is part mystic). Ability to enter such concentration
   at will correlates strongly with wizardliness; it is one of the
   most important skills learned during

                        larval stage
                        . Sometimes
    amplified as 'deep hack mode'.

    Being yanked out of hack mode (see
                        priority interrupt
) may be
    experienced as a physical shock, and the sensation of being in hack
    mode is more than a little habituating. The intensity of this
    experience is probably by itself sufficient explanation for the
    existence of hackers, and explains why many resist being promoted
    out of positions where they can code. See also
                        cyberspace
                            (sense 2).

    Some aspects of hackish etiquette will appear quite odd to an
    observer unaware of the high value placed on hack mode. For
    example, if someone appears at your door, it is perfectly okay to
    hold up a hand (without turning one's eyes away from the screen) to
    avoid being interrupted. One may read, type, and interact with the
    computer for quite some time before further acknowledging the
    other's presence (of course, he or she is reciprocally free to
    leave without a word). The understanding is that you might be in

                        hack mode
                         with a lot of delicate
                        state
                         (sense 2) in your
    head, and you dare not
                        swap
                         that context out until you have
    reached a good point to pause. See also
                        juggling eggs
                        .

hack on vt. To
                        hack
                        ; implies that the subject is some
    pre-existing hunk of code that one is evolving, as opposed to
    something one might
                        hack up
                        .

hack together vt. To throw something together so it will
    work. Unlike 'kluge together' or
                        cruft together
                        , this does
    not necessarily have negative connotations.

hack up vt. To
                        hack
                        , but generally implies that the
    result is a hack in sense 1 (a quick hack). Contrast this with

                        hack on
                        . To 'hack up on' implies a
                        quick-and-dirty

               modification to an existing system. Contrast
          hacked up
          ;
   compare
          kluge up
          ,
          monkey up
          ,
          cruft together
          .

hack value n. Often adduced as the reason or motivation for
   expending effort toward a seemingly useless goal, the point being
   that the accomplished goal is a hack. For example, MacLISP had
   features for reading and printing Roman numerals, which were
   installed purely for hack value. See
          display hack
           for one
   method of computing hack value, but this cannot really be
   explained, only experienced. As Louis Armstrong once said when
   asked to explain jazz: "Man, if you gotta ask you'll never know."
   (Feminists please note Fats Waller's explanation of rhythm: "Lady,
   if you got to ask you ain't got it.")

hacked off adj. [analogous to 'pissed off'] Said of
   system administrators who have become annoyed, upset, or touchy
   owing to suspicions that their sites have been or are going to be
   victimized by crackers, or used for inappropriate, technically
   illegal, or even overtly criminal activities. For example, having
   unreadable files in your home directory called 'worm',
   'lockpick', or 'goroot' would probably be an effective (as well
   as impressively obvious and stupid) way to get your sysadmin hacked
   off at you.

   It has been pointed out that there is precedent for this usage in
   U.S. Navy slang, in which officers under discipline are sometimes
   said to be "in hack" and one may speak of "hacking off the C.O.".

hacked up adj. Sufficiently patched, kluged, and tweaked
   that the surgical scars are beginning to crowd out normal tissue
   (compare
          critical mass
). Not all programs that are hacked
   become 'hacked up'; if modifications are done with some eye to
   coherence and continued maintainability, the software may emerge
   better for the experience. Contrast
          hack up
          .

hacker n. [originally, someone who makes furniture with an
   axe] 1. A person who enjoys exploring the details of programmable
   systems and how to stretch their capabilities, as opposed to most
   users, who prefer to learn only the minimum necessary. 2. One who
   programs enthusiastically (even obsessively) or who enjoys
   programming rather than just theorizing about programming. 3. A
   person capable of appreciating
          hack value

.   4. A person who is
good at programming quickly. 5. An expert at a particular program,
or one who frequently does work using it or on it; as in 'a Unix
hacker'. (Definitions 1 through 5 are correlated, and people who
fit them congregate.) 6. An expert or enthusiast of any kind. One
might be an astronomy hacker, for example. 7. One who enjoys the
intellectual challenge of creatively overcoming or circumventing
limitations. 8. [deprecated] A malicious meddler who tries to
discover sensitive information by poking around. Hence 'password
hacker', 'network hacker'. The correct term for this sense is

            cracker
            .

The term 'hacker' also tends to connote membership in the global
community defined by the net (see
            network, the
             and

            Internet address
). It also implies that the person described
is seen to subscribe to some version of the hacker ethic (see

            hacker ethic, the
).

It is better to be described as a hacker by others than to describe
oneself that way. Hackers consider themselves something of an
elite (a meritocracy based on ability), though one to which new
members are gladly welcome. There is thus a certain ego
satisfaction to be had in identifying yourself as a hacker (but if
you claim to be one and are not, you'll quickly be labeled

            bogus
). See also
            wannabee
            .

hacker ethic, the n. 1. The belief that information-sharing
    is a powerful positive good, and that it is an ethical duty of
    hackers to share their expertise by writing free software and
    facilitating access to information and to computing resources
    wherever possible. 2. The belief that system-cracking for fun and
    exploration is ethically OK as long as the cracker commits no
    theft, vandalism, or breach of confidentiality.

    Both of these normative ethical principles are widely, but by no
    means universally, accepted among hackers. Most hackers subscribe
    to the hacker ethic in sense 1, and many act on it by writing and
    giving away free software. A few go further and assert that
    all information should be free and *any* proprietary
    control of it is bad; this is the philosophy behind the
            GNU
                project.

    Sense 2 is more controversial: some people consider the act of
    cracking itself to be unethical, like breaking and entering. But

    the belief that 'ethical' cracking excludes destruction at least
    moderates the behavior of people who see themselves as 'benign'
    crackers (see also
                samurai
). On this view, it may be one of
    the highest forms of hackerly courtesy to (a) break into a system,
    and then (b) explain to the sysop, preferably by email from a

                superuser
                 account, exactly how it was done and how the hole
    can be plugged -- acting as an unpaid (and unsolicited)

                tiger team
                .

    The most reliable manifestation of either version of the hacker
    ethic is that almost all hackers are actively willing to share
    technical tricks, software, and (where possible) computing
    resources with other hackers. Huge cooperative networks such as

                Usenet
                ,
                FidoNet
                 and Internet (see
                Internet address
)
    can function without central control because of this trait; they
    both rely on and reinforce a sense of community that may be
    hackerdom's most valuable intangible asset.

hacking run n. [analogy with 'bombing run' or 'speed
    run'] A hack session extended long outside normal working times,
    especially one longer than 12 hours. May cause you to 'change
    phase the hard way' (see
                phase
).

Hacking X for Y n. [ITS] Ritual phrasing of part of the
    information which ITS made publicly available about each user.
    This information (the INQUIR record) was a sort of form in which
    the user could fill out various fields. On display, two of these
    fields were always combined into a project description of the form
    "Hacking X for Y" (e.g., '"Hacking perceptrons for
    Minsky"'). This form of description became traditional and has
    since been carried over to other systems with more general
    facilities for self-advertisement (such as Unix
                plan file
                s).

Hackintosh n. 1. An Apple Lisa that has been hacked into
    emulating a Macintosh (also called a 'Mac XL'). 2. A Macintosh
    assembled from parts theoretically belonging to different models in
    the line.

hackish /hak'ish/ adj. (also
                hackishness
                 n.) 1. Said

of something that is or involves a hack. 2. Of or pertaining to
hackers or the hacker subculture. See also
                true-hacker
                .

hackishness n. The quality of being or involving a hack.
   This term is considered mildly silly. Syn.
                hackitude
                .

hackitude n. Syn.
                hackishness
                ; this word is considered
   sillier.

hair n. [back-formation from
                hairy
                ] The complications
   that make something hairy. "Decoding
                TECO
                 commands requires
   a certain amount of hair." Often seen in the phrase 'infinite
   hair', which connotes extreme complexity. Also in 'hairiferous'
   (tending to promote hair growth): "GNUMACS elisp encourages lusers
   to write complex editing modes." "Yeah, it's pretty hairiferous
   all right." (or just: "Hair squared!")

hairball n. [Fidonet] A large batch of messages that a
   store-and-forward network is failing to forward when it should.
   Often used in the phrase "Fido coughed up a hairball today",
   meaning that the stuck messages have just come unstuck, producing a
   flood of mail where there had previously been drought.

hairy adj. 1. Annoyingly complicated. "
                DWIM
                 is
   incredibly hairy." 2. Incomprehensible. "
                DWIM
                 is
   incredibly hairy." 3. Of people, high-powered, authoritative,
   rare, expert, and/or incomprehensible. Hard to explain except in
   context: "He knows this hairy lawyer who says there's nothing to
   worry about." See also
                hirsute
                .

   A well-known result in topology called the Brouwer Fixed-Point
   Theorem states that any continuous transformation of a surface into
   itself has at least one fixed point. Mathematically literate
   hackers tend to associate the term 'hairy' with the informal
   version of this theorem; "You can't comb a hairy ball smooth."

   The adjective 'long-haired' is well-attested to have been in
   slang use among scientists and engineers during the early 1950s; it
   was equivalent to modern 'hairy' senses 1 and 2, and was very
   likely ancestral to the hackish use. In fact the noun
   'long-hair' was at the time used to describe a person satisfying

sense 3. Both senses probably passed out of use when long hair
was adopted as a signature trait by the 1960s counterculture,
leaving hackish 'hairy' as a sort of stunted mutant relic.

HAKMEM /hak'mem/ n. MIT AI Memo 239 (February 1972). A
legendary collection of neat mathematical and programming hacks
contributed by many people at MIT and elsewhere. (The title of the
memo really is "HAKMEM", which is a 6-letterism for 'hacks
memo'.) Some of them are very useful techniques, powerful
theorems, or interesting unsolved problems, but most fall into the
category of mathematical and computer trivia. Here is a sampling
of the entries (with authors), slightly paraphrased:

Item 41 (Gene Salamin): There are exactly 23,000 prime numbers less
than 2^18.

Item 46 (Rich Schroeppel): The most *probable* suit
distribution in bridge hands is 4-4-3-2, as compared to 4-3-3-3,
which is the most *evenly* distributed. This is because the
world likes to have unequal numbers: a thermodynamic effect saying
things will not be in the state of lowest energy, but in the state
of lowest disordered energy.

Item 81 (Rich Schroeppel): Count the magic squares of order 5
(that is, all the 5-by-5 arrangements of the numbers from 1 to 25
such that all rows, columns, and diagonals add up to the same
number). There are about 320 million, not counting those that
differ only by rotation and reflection.

Item 154 (Bill Gosper): The myth that any given programming
language is machine independent is easily exploded by computing the
sum of powers of 2. If the result loops with period = 1
with sign +, you are on a sign-magnitude machine. If the
result loops with period = 1 at −1, you are on a
twos-complement machine. If the result loops with period greater
than 1, including the beginning, you are on a ones-complement
machine. If the result loops with period greater than 1, not
including the beginning, your machine isn't binary -- the pattern
should tell you the base. If you run out of memory, you are on a
string or bignum system. If arithmetic overflow is a fatal error,
some fascist pig with a read-only mind is trying to enforce machine
independence. But the very ability to trap overflow is machine
dependent. By this strategy, consider the universe, or, more
precisely, algebra: Let X = the sum of many powers of 2 =
...111111 (base 2). Now add X to itself:
X + X = ...111110. Thus, 2X = X − 1, so
X = −1. Therefore algebra is run on a machine (the
universe) that is two's-complement.

Item 174 (Bill Gosper and Stuart Nelson): 21963283741 is the only
number such that if you represent it on the
              PDP-10
               as both an
integer and a floating-point number, the bit patterns of the two
representations are identical.

Item 176 (Gosper): The "banana phenomenon" was encountered when

processing a character string by taking the last 3 letters typed
out, searching for a random occurrence of that sequence in the
text, taking the letter following that occurrence, typing it out,
and iterating. This ensures that every 4-letter string output
occurs in the original. The program typed BANANANANANANANA.... We
note an ambiguity in the phrase, "the Nth occurrence of." In one
sense, there are five 00's in 0000000000; in another, there are
nine. The editing program TECO finds five. Thus it finds only the
first ANA in BANANA, and is thus obligated to type N next. By
Murphy's Law, there is but one NAN, thus forcing A, and thus a
loop. An option to find overlapped instances would be useful,
although it would require backing up N – 1 characters before
seeking the next N-character string.

Note: This last item refers to a
                Dissociated Press
                    implementation. See also
                banana problem
                .

HAKMEM also contains some rather more complicated mathematical and
technical items, but these examples show some of its fun flavor.

hakspek /hak'speek/ n. A shorthand method of spelling
    found on many British academic bulletin boards and
                talker system
                s.
    Syllables and whole words in a sentence are replaced by
    single ASCII characters the names of which are phonetically similar
    or equivalent, while multiple letters are usually dropped. Hence,
    'for' becomes '4'; 'two', 'too', and 'to' become '2';
    'ck' becomes 'k'. "Before I see you tomorrow" becomes "b4 i
    c u 2moro". First appeared in London about 1986, and was probably
    caused by the slowness of available talker systems, which operated
    on archaic machines with outdated operating systems and no standard
    methods of communication. Has become rarer since. See also

                talk mode
                .

hammer vt. Commonwealth hackish syn. for
                bang on
                .

hamster n. 1. [Fairchild] A particularly slick little piece
    of code that does one thing well; a small, self-contained hack.
    The image is of a hamster
                happily
                 spinning its exercise wheel.
    2. A tailless mouse; that is, one with an infrared link to a
    receiver on the machine, as opposed to the conventional cable.
    3. [UK] Any item of hardware made by Amstrad, a company famous for
    its cheap plastic PC-almost-compatibles.

hand cruft vt. [pun on 'hand craft'] See
                cruft
                , sense

3.

hand-hacking n.   1. The practice of translating
                 hot spot
                 s
    from an
                 HLL
                  into hand-tuned assembler, as opposed to
    trying to coerce the compiler into generating better code. Both
    the term and the practice are becoming uncommon. See
                 tune
                 ,

                 bum
                 ,
                 by hand
                 ; syn. with v.
                 cruft
                 . 2. More
    generally, manual construction or patching of data sets that would
    normally be generated by a translation utility and interpreted by
    another program, and aren't really designed to be read or modified
    by humans.

hand-roll v.   [from obs. mainstream slang 'hand-rolled' in
    opposition to 'ready-made', referring to cigarettes] To
    perform a normally automated software installation or configuration
    process
                 by hand
                 ; implies that the normal process failed due to
    bugs in the configurator or was defeated by something exceptional
    in the local environment. "The worst thing about being a gateway
    between four different nets is having to hand-roll a new sendmail
    configuration every time any of them upgrades."

handle n.   1. [from CB slang] An electronic pseudonym; a
    'nom de guerre' intended to conceal the user's true identity.
    Network and BBS handles function as the same sort of simultaneous
    concealment and display one finds on Citizen's Band radio, from
    which the term was adopted. Use of grandiose handles is
    characteristic of
                 warez d00dz
                 ,
                 cracker
                 s,
                 weenie
                 s,

                 spod
                 s, and other lower forms of network life; true hackers
    travel on their own reputations rather than invented legendry.
    Compare
                 nick
                 . 2. [Mac] A pointer to a pointer to
    dynamically-allocated memory; the extra level of indirection allows
    on-the-fly memory compaction (to cut down on fragmentation) or
    aging out of unused resources, with minimal impact on the (possibly

multiple) parts of the larger program containing references to the
allocated memory. Compare
                snap
                 (to snap a handle would defeat
its purpose); see also
                aliasing bug
                ,
                dangling pointer
                .

handshaking n. Hardware or software activity designed to
    start or keep two machines or programs in synchronization as they

                do protocol
                . Often applied to human activity; thus, a hacker
    might watch two people in conversation nodding their heads to
    indicate that they have heard each others' points and say "Oh,
    they're handshaking!". See also
                protocol
                .

handwave [poss. from gestures characteristic of stage
    magicians] 1. v. To gloss over a complex point; to distract a
    listener; to support a (possibly actually valid) point with
    blatantly faulty logic. 2. n. The act of handwaving. "Boy, what
    a handwave!"

    If someone starts a sentence with "Clearly..." or
    "Obviously..." or "It is self-evident that...", it is
    a good bet he is about to handwave (alternatively, use of these
    constructions in a sarcastic tone before a paraphrase of someone
    else's argument suggests that it is a handwave). The theory behind
    this term is that if you wave your hands at the right moment, the
    listener may be sufficiently distracted to not notice that what you
    have said is
                bogus
                . Failing that, if a listener does object,
    you might try to dismiss the objection with a wave of your hand.

    The use of this word is often accompanied by gestures: both hands
    up, palms forward, swinging the hands in a vertical plane pivoting
    at the elbows and/or shoulders (depending on the magnitude of the
    handwave); alternatively, holding the forearms in one position
    while rotating the hands at the wrist to make them flutter. In
    context, the gestures alone can suffice as a remark; if a speaker
    makes an outrageously unsupported assumption, you might simply wave
    your hands in this way, as an accusation, far more eloquent than
    words could express, that his logic is faulty.

hang v. 1. To wait for an event that will never occur.
    "The system is hanging because it can't read from the crashed
    drive". See
                wedged
                ,
                hung
                . 2. To wait for some event to
    occur; to hang around until something happens. "The program

displays a menu and then hangs until you type a character."
Compare
> block
> . 3. To attach a peripheral device, esp. in
the construction 'hang off': "We're going to hang another tape
drive off the file server." Implies a device attached with
cables, rather than something that is strictly inside the machine's
chassis.

Hanlon's Razor prov. A corollary of
> Finagle's Law
> ,
similar to Occam's Razor, that reads "Never attribute to malice
that which can be adequately explained by stupidity." The
derivation of the common title Hanlon's Razor is unknown; a similar
epigram has been attributed to William James. Quoted here because
it seems to be a particular favorite of hackers, often showing up
in
> sig block
> s,
> fortune cookie
> files and the login banners
of BBS systems and commercial networks. This probably reflects the
hacker's daily experience of environments created by
well-intentioned but short-sighted people. Compare

> Sturgeon's Law
> .

happily adv. Of software, used to emphasize that a program
is unaware of some important fact about its environment, either
because it has been fooled into believing a lie, or because it
doesn't care. The sense of 'happy' here is not that of elation,
but rather that of blissful ignorance. "The program continues to
run, happily unaware that its output is going to /dev/null." Also
used to suggest that a program or device would really rather be
doing something destructive, and is being given an opportunity to
do so. "If you enter an O here instead of a zero, the program
will happily erase all your data."

haque /hak/ n. [Usenet] Variant spelling of
> hack
> ,
used only for the noun form and connoting an
> elegant
>   hack. that is a
> hack
> in sense 2.

hard boot n. See
> boot
> .

hardcoded adj. 1. Said of data inserted directly into a
program, where it cannot be easily modified, as opposed to data in
some
> profile

, resource (see
de-rezz
 sense 2), or
environment variable that a
user
 or hacker can easily modify.
2. In C, this is esp. applied to use of a literal instead of a
'#define' macro (see
magic number
).

hardwarily /hard-weir'*-lee/ adv. In a way pertaining to
hardware. "The system is hardwarily unreliable." The adjective
'hardwary' is *not* traditionally used, though it has
recently been reported from the U.K. See
softwarily
.

hardwired adj. 1. In software, syn. for
hardcoded
.
2. By extension, anything that is not modifiable, especially in the
sense of customizable to one's particular needs or tastes.

has the X nature [seems to derive from Zen Buddhist koans
of the form "Does an X have the Buddha-nature?"] adj. Common
hacker construction for 'is an X', used for humorous emphasis.
"Anyone who can't even use a program with on-screen help embedded
in it truly has the
loser
 nature!" See also

the X that can be Y is not the true X
.

hash bucket n. A notional receptacle, a set of which might
be used to apportion data items for sorting or lookup purposes.
When you look up a name in the phone book (for example), you
typically hash it by extracting its first letter; the hash buckets
are the alphabetically ordered letter sections. This term is used
as techspeak with respect to code that uses actual hash functions;
in jargon, it is used for human associative memory as well. Thus,
two things 'in the same hash bucket' are more difficult to
discriminate, and may be confused. "If you hash English words
only by length, you get too many common grammar words in the first
couple of hash buckets." Compare
hash collision
.

hash collision n. [from the techspeak] (var. 'hash
clash') When used of people, signifies a confusion in associative
memory or imagination, especially a persistent one (see

thinko
). True story: One of us [ESR] was once on the phone
with a friend about to move out to Berkeley. When asked what he
expected Berkeley to be like, the friend replied: "Well, I have

   this mental picture of naked women throwing Molotov cocktails, but
   I think that's just a collision in my hash tables." Compare

                hash bucket
                .

hat n. Common (spoken) name for the circumflex ('^', ASCII
   1011110) character. See
                ASCII
                 for other synonyms.

HCF /H-C-F/ n. Mnemonic for 'Halt and Catch Fire', any
   of several undocumented and semi-mythical machine instructions with
   destructive side-effects, supposedly included for test purposes on
   several well-known architectures going as far back as the IBM 360.
   The MC6800 microprocessor was the first for which an HCF opcode
   became widely known. This instruction caused the processor to

                toggle
                 a subset of the bus lines as rapidly as it could; in
   some configurations this could actually cause lines to burn up.

heads down [Sun] adj. Concentrating, usually so heavily and
   for so long that everything outside the focus area is missed. See
   also
                hack mode
                 and
                larval stage
                , although this mode is
   hardly confined to fledgling hackers.

heartbeat n. 1. The signal emitted by a Level 2 Ethernet
   transceiver at the end of every packet to show that the
   collision-detection circuit is still connected. 2. A periodic
   synchronization signal used by software or hardware, such as a bus
   clock or a periodic interrupt. 3. The 'natural' oscillation
   frequency of a computer's clock crystal, before frequency division
   down to the machine's clock rate. 4. A signal emitted at regular
   intervals by software to demonstrate that it is still alive.
   Sometimes hardware is designed to reboot the machine if it stops
   hearing a heartbeat. See also
                breath-of-life packet
                .

heatseeker n. [IBM] A customer who can be relied upon to
   buy, without fail, the latest version of an existing product (not
   quite the same as a member of the
                lunatic fringe
). A 1993
   example of a heatseeker is someone who, owning a 286 PC and Windows
   3.0, goes out and buys Windows 3.1 (which offers no worthwhile
   benefits unless you have a 386). If all customers were
   heatseekers, vast amounts of money could be made by just fixing the
   bugs in each release (n) and selling it to them as release (n+1).

heavy metal n. [Cambridge] Syn.
                big iron

.

heavy wizardry n. Code or designs that trade on a
    particularly intimate knowledge or experience of a particular
    operating system or language or complex application interface.
    Distinguished from
                deep magic
                , which trades more on arcane
    theoretical knowledge. Writing device drivers is heavy
    wizardry; so is interfacing to
                X
                 (sense 2) without a toolkit.
    Esp. found in source-code comments of the form "Heavy wizardry
    begins here". Compare
                voodoo programming
                .

heavyweight adj. High-overhead;
                baroque
                ;
    code-intensive; featureful, but costly. Esp. used of
    communication protocols, language designs, and any sort of
    implementation in which maximum generality and/or ease of
    implementation has been pushed at the expense of mundane
    considerations such as speed, memory utilization, and startup time.

                EMACS
                 is a heavyweight editor;
                X
                 is an *extremely*
    heavyweight window system. This term isn't pejorative, but one
    hacker's heavyweight is another's
                elephantine
                 and a third's

                monstrosity
                . Oppose 'lightweight'. Usage: now borders on
    techspeak, especially in the compound 'heavyweight process'.

heisenbug /hi:'zen-buhg/ n. [from Heisenberg's
    Uncertainty Principle in quantum physics] A bug that disappears or
    alters its behavior when one attempts to probe or isolate it.
    (This usage is not even particularly fanciful; the use of a
    debugger sometimes alters a program's operating environment
    significantly enough that buggy code, such as that which relies on
    the values of uninitialized memory, behaves quite differently.)
    Antonym of
                Bohr bug
                ; see also
                mandelbug
                ,

                schroedinbug
                . In C, nine out of ten heisenbugs result from
    uninitialized auto variables,
                fandango on core
                 phenomena

    (esp. lossage related to corruption of the malloc
                arena
) or
    errors that
                smash the stack
                .

Helen Keller mode n. 1. State of a hardware or software
    system that is deaf, dumb, and blind, i.e., accepting no input and
    generating no output, usually due to an infinite loop or some other
    excursion into
                deep space
                . (Unfair to the real Helen Keller,
    whose success at learning speech was triumphant.) See also

                go flatline
                ,
                catatonic
                . 2. On IBM PCs under DOS, refers to a
    specific failure mode in which a screen saver has kicked in over an

                ill-behaved
                application which bypasses the very interrupts the
    screen saver watches for activity. Your choices are to try to get
    from the program's current state through a successful save-and-exit
    without being able to see what you're doing, or to re-boot the
    machine. This isn't (strictly speaking) a crash.

hello, sailor! interj. Occasional West Coast equivalent of

                hello, world
                ; seems to have originated at SAIL, later
    associated with the game
                Zork
                (which also included "hello,
    aviator" and "hello, implementor"). Originally from the
    traditional hooker's greeting to a swabbie fresh off the boat, of
    course.

hello, wall! excl. See
                wall
                .

hello, world interj. 1. The canonical minimal test message
    in the C/Unix universe. 2. Any of the minimal programs that emit
    this message. Traditionally, the first program a C coder is
    supposed to write in a new environment is one that just prints
    "hello, world" to standard output (and indeed it is the first
    example program in
                K&R
). Environments that generate an
    unreasonably large executable for this trivial test or which
    require a
                hairy
                compiler-linker invocation to generate it are
    considered to
                lose

                  (see
                X
). 3. Greeting uttered by a
    hacker making an entrance or requesting information from anyone
    present. "Hello, world! Is the
                VAX
                 back up yet?"

hex n. 1. Short for
                hexadecimal
                , base 16. 2. A 6-pack
    of anything (compare
                quad
                , sense 2). Neither usage has
    anything to do with
                magic
                 or
                black art
                , though the pun is
    appreciated and occasionally used by hackers. True story: As a
    joke, some hackers once offered some surplus ICs for sale to be
    worn as protective amulets against hostile magic. The chips were,
    of course, hex inverters.

hexadecimal n. Base 16. Coined in the early 1960s to
    replace earlier 'sexadecimal', which was too racy and amusing
    for stuffy IBM, and later adopted by the rest of the industry.

    Actually, neither term is etymologically pure. If we take
    'binary' to be paradigmatic, the most etymologically correct
    term for base 10, for example, is 'denary', which comes from
    'deni' (ten at a time, ten each), a Latin 'distributive'
    number; the corresponding term for base-16 would be something like
    'sendenary'. 'Decimal' is from an ordinal number; the
    corresponding prefix for 6 would imply something like
    'sextidecimal'. The 'sexa-' prefix is Latin but incorrect in
    this context, and 'hexa-' is Greek. The word 'octal' is
    similarly incorrect; a correct form would be 'octaval' (to go
    with decimal), or 'octonary' (to go with binary). If anyone ever
    implements a base-3 computer, computer scientists will be faced
    with the unprecedented dilemma of a choice between two
    correct forms; both 'ternary' and 'trinary' have a
    claim to this throne.

hexit /hek'sit/ n. A hexadecimal digit (0--9, and A--F or
    a--f). Used by people who claim that there are only *ten*
    digits, dammit; sixteen-fingered human beings are rather rare,
    despite what some keyboard designs might seem to imply (see

                space-cadet keyboard
).

HHOK See
                ha ha only serious
                .

HHOS See

                    ha ha only serious
                    .

hidden flag n. [scientific computation] An extra option
   added to a routine without changing the calling sequence. For
   example, instead of adding an explicit input variable to instruct a
   routine to give extra diagnostic output, the programmer might just
   add a test for some otherwise meaningless feature of the existing
   inputs, such as a negative mass. The use of hidden flags can make
   a program very hard to debug and understand, but is all too common
   wherever programs are hacked on in a hurry.

high bit n. [from 'high-order bit'] 1. The most
   significant bit in a byte. 2. By extension, the most significant
   part of something other than a data byte: "Spare me the whole

                saga
                , just give me the high bit." See also
                meta bit
                ,

                hobbit
                ,
                dread high-bit disease
                , and compare the
   mainstream slang 'bottom line'.

high moby /hi:' mohb'ee/ n. The high half of a 512K

                PDP-10
                's physical address space; the other half was of course
   the low moby. This usage has been generalized in a way that has
   outlasted the
                PDP-10
                ; for example, at the 1990 Washington D.C.
   Area Science Fiction Conclave (Disclave), when a miscommunication
   resulted in two separate wakes being held in commemoration of the
   shutdown of MIT's last
                ITS
                 machines, the one on the upper
   floor was dubbed the 'high moby' and the other the 'low moby'.
   All parties involved
                grok
                ked this instantly. See
                moby
                .

highly adv. [scientific computation] The preferred modifier
   for overstating an understatement. As in: 'highly nonoptimal',
   the worst possible way to do something; 'highly nontrivial',
   either impossible or requiring a major research project; 'highly
   nonlinear', completely erratic and unpredictable; 'highly
   nontechnical', drivel written for
                luser
                s, oversimplified to
   the point of being misleading or incorrect (compare

```
                  drool-proof paper
                  ).  In other computing cultures, postfixing of

                  in the extreme
                   might be preferred.
```

hing // n. [IRC] Fortuitous typo for 'hint', now in
    wide intentional use among players of
```
                  initgame
                  .  Compare

                  newsfroup
                  ,
                  filk
                  .
```

hired gun n. A contract programmer, as opposed to a
    full-time staff member. All the connotations of this term
    suggested by innumerable spaghetti Westerns are intentional.

hirsute adj. Occasionally used humorously as a synonym for

```
                  hairy
                  .
```

HLL /H-L-L/ n. [High-Level Language (as opposed to
    assembler)] Found primarily in email and news rather than speech.
    Rarely, the variants 'VHLL' and 'MLL' are found. VHLL stands for
    'Very-High-Level Language' and is used to describe a

```
                  bondage-and-discipline language
                   that the speaker happens to
```
    like; Prolog and Backus's FP are often called VHLLs. 'MLL' stands
    for 'Medium-Level Language' and is sometimes used half-jokingly to
    describe
```
                  C
                  , alluding to its 'structured-assembler' image.
```
    See also
```
                  languages of choice
                  .
```

hoarding n. See
```
                  software hoarding
                  .
```

hobbit n. 1. The High Order Bit of a byte; same as the

```
                  meta bit
                   or
                  high bit
                  . 2. The non-ITS name of
```
    vad@ai.mit.edu (*Hobbit*), master of lasers.

hog n.,vt. 1. Favored term to describe programs or hardware
    that seem to eat far more than their share of a system's resources,
    esp. those which noticeably degrade interactive response.
    Not used of programs that are simply extremely large or

complex or that are merely painfully slow themselves (see

                pig, run like a
). More often than not encountered in qualified
    forms, e.g., 'memory hog', 'core hog', 'hog the processor', 'hog
    the disk'. "A controller that never gives up the I/O bus gets
    killed after the bus-hog timer expires." 2. Also said of
    people who use more than their fair share of resources
    (particularly disk, where it seems that 10% of the people use 90%
    of the disk, no matter how big the disk is or how many people use
    it). Of course, once disk hogs fill up one filesystem, they
    typically find some other new one to infect, claiming to the
    sysadmin that they have an important new project to complete.

hole n. A region in an otherwise
                flat
                 entity which is
    not actually present. For example, some Unix filesystems can store
    large files with holes so that unused regions of the file are never
    actually stored on disk. (In techspeak, these are referred to as
    'sparse' files.) As another example, the region of memory in IBM
    PCs reserved for memory-mapped I/O devices which may not actually
    be present is called 'the I/O hole', since memory-management
    systems must skip over this area when filling user requests for
    memory.

holy wars [from
                Usenet
                , but may predate it]
    n.
                flame war
                s over
                religious issues
                . The paper by Danny
    Cohen that popularized the terms
                big-endian
                 and

                little-endian
                 in connection with the LSB-first/MSB-first
    controversy was entitled "On Holy Wars and a Plea for Peace".
    Other perennial Holy Wars have included
                EMACS
                 vs.
                vi
                ,
    my personal computer vs. everyone else's personal computer,

                ITS
                 vs.
                Unix
                ,
                Unix
                 vs.
                VMS
                ,
                BSD

```
               Unix
   vs.
               USG Unix
               ,
               C
                vs.
               Pascal
               ,
               C
                vs.
   FORTRAN, etc., ad nauseam.  The characteristic that distinguishes
   holy wars from normal technical disputes is that in a holy war
   most of the participants spend their time trying to pass off
   personal value choices and cultural attachments as objective
   technical evaluations.  See also
               theology
               .
```

home box n. A hacker's personal machine, especially one he
   or she owns. "Yeah? Well, *my* home box runs a full 4.2
   BSD, so there!"

home machine n. 1. Syn.
               home box
                . 2. The machine that
   receives your email. These senses might be distinct, for example,
   for a hacker who owns one computer at home, but reads email at
   work.

hook n. A software or hardware feature included in order to
   simplify later additions or changes by a user. For example, a
   simple program that prints numbers might always print them in base
   10, but a more flexible version would let a variable determine what
   base to use; setting the variable to 5 would make the program print
   numbers in base 5. The variable is a simple hook. An even more
   flexible program might examine the variable and treat a value of 16
   or less as the base to use, but treat any other number as the
   address of a user-supplied routine for printing a number. This is
   a
               hairy
                but powerful hook; one can then write a routine to
   print numbers as Roman numerals, say, or as Hebrew characters, and
   plug it into the program through the hook. Often the difference
   between a good program and a superb one is that the latter has
   useful hooks in judiciously chosen places. Both may do the
   original job about equally well, but the one with the hooks is much
   more flexible for future expansion of capabilities (
               EMACS
               , for
   example, is *all* hooks). The term 'user exit' is
   synonymous but much more formal and less hackish.

hop 1. n. One file transmission in a series required to get
   a file from point A to point B on a store-and-forward network. On
   such networks (including
               UUCPNET
                and

                    FidoNet
                    ), an
   important inter-machine metric is the number of hops in the
   shortest path between them, which can be more significant than
   their geographical separation. See
                    bang path
                    . 2. v. To log in
   to a remote machine, esp. via rlogin or telnet. "I'll hop over to
   foovax to FTP that."

hose 1. vt. To make non-functional or greatly degraded in
   performance. "That big ray-tracing program really hoses the
   system." See
                    hosed
                    . 2. n. A narrow channel through which
   data flows under pressure. Generally denotes data paths that
   represent performance bottlenecks. 3. n. Cabling, especially thick
   Ethernet cable. This is sometimes called 'bit hose' or
   'hosery' (play on 'hosiery') or 'etherhose'. See also

                    washing machine
                    .

hosed adj. Same as
                    down
                    . Used primarily by Unix
   hackers. Humorous: also implies a condition thought to be
   relatively easy to reverse. Probably derived from the Canadian
   slang 'hoser' popularized by the Bob and Doug Mackenzie skits on
   SCTV, but this usage predated SCTV by years in hackerdom (it was
   certainly already live at CMU in the 1970s). See
                    hose
                    . It is
   also widely used of people in the mainstream sense of 'in an
   extremely unfortunate situation'.

   Once upon a time, a Cray that had been experiencing periodic
   difficulties crashed, and it was announced to have been hosed.
   It was discovered that the crash was due to the disconnection of
   some coolant hoses. The problem was corrected, and users were then
   assured that everything was OK because the system had been rehosed.
   See also
                    dehose
                    .

hot chat n. Sexually explicit one-on-one chat. See

                    teledildonics
                    .

hot spot n. 1. [primarily used by C/Unix programmers, but
   spreading] It is received wisdom that in most programs, less than
   10% of the code eats 90% of the execution time; if one were to
   graph instruction visits versus code addresses, one would typically
   see a few huge spikes amidst a lot of low-level noise. Such spikes
   are called 'hot spots' and are good candidates for heavy
   optimization or

                    hand-hacking
                    . The term is especially used of
    tight loops and recursions in the code's central algorithm, as
    opposed to (say) initial set-up costs or large but infrequent I/O
    operations. See
                    tune
                    ,
                    bum
                    ,
                    hand-hacking
                    . 2. The
    active location of a cursor on a bit-map display. "Put the
    mouse's hot spot on the 'ON' widget and click the left button."
    3. A screen region that is sensitive to mouse gestures, which
    trigger some action. World Wide Web pages are now the canonical
    example; WWW browsers present hypertext links as hot spots which,
    when clicked on, point the browser at another document. 4. In a
    massively parallel computer with shared memory, the one location
    that all 10,000 processors are trying to read or write at once
    (perhaps because they are all doing a
                    busy-wait
                     on the same
    lock). 5. More generally, any place in a hardware design that
    turns into a performance bottleneck due to resource contention.

hotlink /hot'link/ n. A
                    hot spot
                     on a World Wide Web
    page; and area, which, when clicked or selected, chases a URL.
    Also spelled 'hot link'.

house wizard n. [prob. from ad-agency tradetalk, 'house
    freak'] A hacker occupying a technical-specialist, R&D, or systems
    position at a commercial shop. A really effective house wizard can
    have influence out of all proportion to his/her ostensible rank and
    still not have to wear a suit. Used esp. of Unix wizards. The
    term 'house guru' is equivalent.

HP-SUX /H-P suhks/ n. Unflattering hackerism for HP-UX,
    Hewlett-Packard's Unix port, which features some truly unique
    bogosities in the filesystem internals and elsewhere (these
    occasionally create portability problems). HP-UX is often referred
    to as 'hockey-pux' inside HP, and one respondent claims that the
    proper pronunciation is /H-P ukkkhhhh/ as though one were about
    to spit. Another such alternate spelling and pronunciation is
    "H-PUX" /H-puhks/. Hackers at HP/Apollo (the former Apollo
    Computers which was swallowed by HP in 1989) have been heard to
    complain that Mr. Packard should have pushed to have his name
    first, if for no other reason than the greater eloquence of the
    resulting acronym. Compare
                    AIDX
                    ,
                    buglix
                    . See also

                    Nominal Semidestructor
                    ,

> Telerat
>
> ,
>
> Open DeathTrap
>
> ,
>
> ScumOS
>
> ,
> sun-stools
>
> .

huff v. To compress data using a Huffman code. Various
   programs that use such methods have been called 'HUFF' or some
   variant thereof. Oppose
> puff
> . Compare
> crunch
>
> ,
>
> compress
>
> .

humma // excl. A filler word used on various 'chat'
   and 'talk' programs when you had nothing to say but felt that it
   was important to say something. The word apparently originated (at
   least with this definition) on the MECC Timeshare System (MTS, a
   now-defunct educational time-sharing system running in Minnesota
   during the 1970s and the early 1980s) but was later sighted on
   early Unix systems. Compare the U.K's
> wibble
>
> .

Humor, Hacker n. A distinctive style of shared
   intellectual humor found among hackers, having the following marked
   characteristics:

   1. Fascination with form-vs.-content jokes, paradoxes, and humor
   having to do with confusion of metalevels (see
> meta
>). One way
   to make a hacker laugh: hold a red index card in front of him/her
   with "GREEN" written on it, or vice-versa (note, however, that
   this is funny only the first time).

   2. Elaborate deadpan parodies of large intellectual constructs,
   such as specifications (see
> write-only memory
>), standards
   documents, language descriptions (see
> INTERCAL
>), and even
   entire scientific theories (see
> quantum bogodynamics
>
> ,
>
> computron
>).

3. Jokes that involve screwily precise reasoning from bizarre, ludicrous, or just grossly counter-intuitive premises.

4. Fascination with puns and wordplay.

5. A fondness for apparently mindless humor with subversive currents of intelligence in it -- for example, old Warner Brothers and Rocky & Bullwinkle cartoons, the Marx brothers, the early B-52s, and Monty Python's Flying Circus. Humor that combines this trait with elements of high camp and slapstick is especially favored.

6. References to the symbol-object antinomies and associated ideas in Zen Buddhism and (less often) Taoism. See
                has the X nature
                ,

                Discordianism
                ,
                zen
                ,
                ha ha only serious
                ,
                AI koans
                .

    See also
                filk
                ,
                retrocomputing
                , and
                A Portrait of J. Random Hacker
                   in Appendix B. If you have an itchy feeling that
    all 6 of these traits are really aspects of one thing that is
    incredibly difficult to talk about exactly, you are (a) correct and
    (b) responding like a hacker. These traits are also recognizable
    (though in a less marked form) throughout
                science-fiction fandom
                .

hung adj. [from 'hung up'] Equivalent to
                wedged
                , but
    more common at Unix/C sites. Not generally used of people.
    Syn. with
                locked up
                ,
                wedged
                ; compare
                hosed
                . See
    also
                hang
                . A hung state is distinguished from
                crash
                ed or

```
                down
                , where the program or system is also unusable but because
    it is not running rather than because it is waiting for something.
    However, the recovery from both situations is often the same.

hungry puppy n.  Syn.
                slopsucker
                .

hungus /huhng'g*s/ adj.  [perhaps related to slang
    'humongous'] Large, unwieldy, usually unmanageable.  "TCP is a
    hungus piece of code."  "This is a hungus set of modifications."

hyperspace /hi:'per-spays/ n.  A memory location that is
    *far* away from where the program counter should be pointing,
    especially a place that is inaccessible because it is not even
    mapped in by the virtual-memory system.  "Another core dump ---
    looks like the program jumped off to hyperspace somehow."
    (Compare
                jump off into never-never land
                .)  This usage is from
    the SF notion of a spaceship jumping 'into hyperspace', that is,
    taking a shortcut through higher-dimensional space -- in other
    words, bypassing this universe.  The variant 'east hyperspace' is
    recorded among CMU and Bliss hackers.

hysterical reasons n.  (also 'hysterical raisins') A
    variant on the stock phrase "for historical reasons", indicating
    specifically that something must be done in some stupid way for
    backwards compatibility, and moreover that the feature it must be
    compatible with was the result of a bad design in the first place.
    "All IBM PC video adapters have to support MDA text mode for
    hysterical reasons."  Compare
                bug-for-bug compatible
                .
```

1.14   I

```
                I didn't change anything! interj.  An aggrieved cry often
    heard as bugs manifest during a regression test.  The

                canonical
                 reply to this assertion is "Then it works just the
    same as it did before, doesn't it?"  See also
                one-line fix
                .
    This is also heard from applications programmers trying to blame an
    obvious applications problem on an unrelated systems software
    change, for example a divide-by-0 fault after terminals were added
    to a network.  Usually, their statement is found to be false.  Upon
    close questioning, they will admit some major restructuring of the
    program that shouldn't have broken anything, in their opinion, but
    which actually
                hosed
```

                    the code completely.

I see no X here. Hackers (and the interactive computer
   games they write) traditionally favor this slightly marked usage
   over other possible equivalents such as "There's no X here!" or
   "X is missing." or "Where's the X?". This goes back to the
   original PDP-10
                ADVENT
                , which would respond in this wise if
   you asked it to do something involving an object not present at
   your location in the game.

IBM /I-B-M/ Inferior But Marketable; It's Better
   Manually; Insidious Black Magic; It's Been Malfunctioning;
   Incontinent Bowel Movement; and a near-
                infinite
                 number of even
   less complimentary expansions, including 'International Business
   Machines'. See
                TLA
                . These abbreviations illustrate the
   considerable antipathy most hackers have long felt toward the
   'industry leader' (see
                fear and loathing
).

   What galls hackers about most IBM machines above the PC level isn't
   so much that they are underpowered and overpriced (though that does
   count against them), but that the designs are incredibly archaic,

                crufty
                , and
                elephantine
                 ... and you can't *fix* them
   -- source code is locked up tight, and programming tools are
   expensive, hard to find, and bletcherous to use once you've found
   them. With the release of the Unix-based RIOS family this may have
   begun to change -- but then, we thought that when the PC-RT came
   out, too.

   In the spirit of universal peace and brotherhood, this lexicon now
   includes a number of entries attributed to 'IBM'; these derive from
   some rampantly unofficial jargon lists circulated within IBM's own
   beleaguered hacker underground.

IBM discount n. A price increase. Outside IBM, this
   derives from the common perception that IBM products are generally
   overpriced (see
                clone
                ); inside, it is said to spring from a
   belief that large numbers of IBM employees living in an area cause
   prices to rise.

ICBM address n. (Also 'missile address') The form used to
   register a site with the Usenet mapping project includes a blank
   for longitude and latitude, preferably to seconds-of-arc accuracy.
   This is actually used for generating geographically-correct maps of

Usenet links on a plotter; however, it has become traditional to
refer to this as one's 'ICBM address' or 'missile address', and
many people include it in their
                sig block
                 with that name.   (A
real missile address would include target altitude.)

ice n.   [coined by Usenetter Tom Maddox, popularized by
   William Gibson's cyberpunk SF novels: a contrived acronym for
   'Intrusion Countermeasure Electronics'] Security software (in
   Gibson's novels, software that responds to intrusion by attempting
   to immobilize or even literally kill the intruder).   Hence,
   'icebreaker': a program designed for cracking security on a
   system.

   Neither term is in serious use yet as of early 1996, but many
   hackers find the metaphor attractive, and each may develop a
   denotation in the future. In the meantime, the speculative usage
   could be confused with 'ICE', an acronym for "in-circuit
   emulator".

idempotent adj.   [from mathematical techspeak] Acting as if
   used only once, even if used multiple times.   This term is often
   used with respect to
                C
                 header files, which contain common
   definitions and declarations to be included by several source
   files.   If a header file is ever included twice during the same
   compilation (perhaps due to nested #include files), compilation
   errors can result unless the header file has protected itself
   against multiple inclusion; a header file so protected is said to
   be idempotent.   The term can also be used to describe an
   initialization subroutine that is arranged to perform some critical
   action exactly once, even if the routine is called several times.

If you want X, you know where to find it.   There is a legend
   that Dennis Ritchie, inventor of
                C
                , once responded to demands
   for features resembling those of what at the time was a much more
   popular language by observing "If you want PL/I, you know where to
   find it."   Ever since, this has been hackish standard form for
   fending off requests to alter a new design to mimic some older
   (and, by implication, inferior and
                baroque
) one.   The case X =

                Pascal
                 manifests semi-regularly on Usenet's comp.lang.c
   newsgroup.   Indeed, the case X = X has been reported in discussions
   of graphics software (see
                X
).

ifdef out /if'def owt/ v.   Syn. for
                condition out
                '

          specific to
                    C
                    .

ill-behaved adj. 1. [numerical analysis] Said of an
   algorithm or computational method that tends to blow up because of
   accumulated roundoff error or poor convergence properties.
   2. Software that bypasses the defined
                    OS
                     interfaces to do
   things (like screen, keyboard, and disk I/O) itself, often in a way
   that depends on the hardware of the machine it is running on or
   which is nonportable or incompatible with other pieces of software.
   In the IBM PC/MS-DOS world, there is a folk theorem (nearly true)
   to the effect that (owing to gross inadequacies and performance
   penalties in the OS interface) all interesting applications are
   ill-behaved. See also
                    bare metal
                    . Oppose
                    well-behaved
                    ,
   compare
                    PC-ism
                    . See
                    mess-dos
                    .

IMHO // abbrev. [from SF fandom via Usenet; abbreviation for
   'In My Humble Opinion'] "IMHO, mixed-case C names should be
   avoided, as mistyping something in the wrong case can cause
   hard-to-detect errors -- and they look too Pascalish anyhow."
   Also seen in variant forms such as IMNSHO (In My Not-So-Humble
   Opinion) and IMAO (In My Arrogant Opinion).

Imminent Death Of The Net Predicted! prov. [Usenet] Since

                    Usenet
                     first got off the ground in 1980--81, it has grown
   exponentially, approximately doubling in size every year. On the
   other hand, most people feel the
                    signal-to-noise ratio
                     of
   Usenet has dropped steadily. These trends led, as far back as
   mid-1983, to predictions of the imminent collapse (or death) of the
   net. Ten years and numerous doublings later, enough of these
   gloomy prognostications have been confounded that the phrase
   "Imminent Death Of The Net Predicted!" has become a running joke,
   hauled out any time someone grumbles about the
                    S/N ratio
                     or
   the huge and steadily increasing volume, or the possible loss of a
   key node or link, or the potential for lawsuits when ignoramuses
   post copyrighted material, etc., etc., etc.

in the extreme adj. A preferred superlative suffix for many
   hackish terms. See, for example, 'obscure in the extreme' under

                    obscure
                    , and compare
                    highly
                    .

inc /ink/ v. Verbal (and only rarely written) shorthand
    for increment, i.e. 'increase by one'. Especially used by
    assembly programmers, as many assembly languages have an 'inc'
    mnemonic. Antonym:
                    dec
                    .

incantation n. Any particularly arbitrary or obscure
    command that one must mutter at a system to attain a desired
    result. Not used of passwords or other explicit security features.
    Especially used of tricks that are so poorly documented that they
    must be learned from a
                    wizard
                    . "This compiler normally
    locates initialized data in the data segment, but if you

                    mutter
                     the right incantation they will be forced into text
    space."

include vt. [Usenet] 1. To duplicate a portion (or whole)
    of another's message (typically with attribution to the source) in
    a reply or followup, for clarifying the context of one's response.
    See the discussion of inclusion styles under "Hacker Writing
    Style". 2. [from
                    C
                    ] '#include <disclaimer.h>' has
    appeared in
                    sig block
                    s to refer to a notional 'standard

                    disclaimer
                     file'.

include war n. Excessive multi-leveled including within a
    discussion
                    thread
                    , a practice that tends to annoy readers. In
    a forum with high-traffic newsgroups, such as Usenet, this can lead
    to
                    flame
                    s and the urge to start a
                    kill file
                    .

indent style n. [C programmers] The rules one uses to
    indent code in a readable fashion. There are four major C indent
    styles, described below; all have the aim of making it easier for
    the reader to visually track the scope of control constructs. The
    significant variable is the placement of '{' and '}'
    with respect to the statement(s) they enclose and to the guard or
    controlling statement ('if', 'else', 'for',

'while', or 'do') on the block, if any.

'K&R style' -- Named after Kernighan & Ritchie, because the
examples in
                K&R
                are formatted this way. Also called 'kernel
style' because the Unix kernel is written in it, and the 'One True
Brace Style' (abbrev. 1TBS) by its partisans. The basic indent
shown here is eight spaces (or one tab) per level; four spaces are
occasionally seen, but are much less common.

```
  if (cond) {
          <body>
  }
```

'Allman style' -- Named for Eric Allman, a Berkeley hacker who
wrote a lot of the BSD utilities in it (it is sometimes called
'BSD style'). Resembles normal indent style in Pascal and
Algol. Basic indent per level shown here is eight spaces, but four
spaces are just as common (esp. in C++ code).

```
  if (cond)
  {
          <body>
  }
```

'Whitesmiths style' -- popularized by the examples that came
with Whitesmiths C, an early commercial C compiler. Basic indent
per level shown here is eight spaces, but four spaces are
occasionally seen.

```
  if (cond)
          {
          <body>
          }
```

'GNU style' -- Used throughout GNU EMACS and the Free Software
Foundation code, and just about nowhere else. Indents are always
four spaces per level, with '{' and '}' halfway between the
outer and inner indent levels.

```
  if (cond)
    {
      <body>
    }
```

Surveys have shown the Allman and Whitesmiths styles to be the most
common, with about equal mind shares. K&R/1TBS used to be nearly
universal, but is now much less common (the opening brace tends to
get lost against the right paren of the guard part in an 'if'
or 'while', which is a
                Bad Thing
). Defenders of 1TBS
argue that any putative gain in readability is less important than
their style's relative economy with vertical space, which enables
one to see more code on one's screen at once. Doubtless these
issues will continue to be the subject of

```
                holy wars
                .
```

index n. See
```
                coefficient of X
                .
```

infant mortality n. It is common lore among hackers (and in
   the electronics industry at large; this term is possibly techspeak
   by now) that the chances of sudden hardware failure drop off
   exponentially with a machine's time since first use (that is, until
   the relatively distant time at which enough mechanical wear in I/O
   devices and thermal-cycling stress in components has accumulated
   for the machine to start going senile). Up to half of all chip and
   wire failures happen within a new system's first few weeks; such
   failures are often referred to as 'infant mortality' problems
   (or, occasionally, as 'sudden infant death syndrome'). See

```
                bathtub curve
                ,
                burn-in period
                .
```

infinite adj. Consisting of a large number of objects;
   extreme. Used very loosely as in: "This program produces infinite
   garbage." "He is an infinite loser." The word most likely to
   follow 'infinite', though, is
```
                hair
                . (It has been pointed
```
   out that fractals are an excellent example of infinite hair.)
   These uses are abuses of the word's mathematical meaning. The term
   'semi-infinite', denoting an immoderately large amount of some
   resource, is also heard. "This compiler is taking a semi-infinite
   amount of time to optimize my program." See also
```
                semi
                .
```

infinite loop n. One that never terminates (that is, the
   machine
```
                spin
                s or
                buzz
                es forever and goes
                catatonic
                ).
```
   There is a standard joke that has been made about each generation's
   exemplar of the ultra-fast machine: "The Cray-3 is so fast it can
   execute an infinite loop in under 2 seconds!"

Infinite-Monkey Theorem n. "If you put an
```
                infinite
                    number of monkeys at typewriters, eventually one will bash out  ←
                        the
```
   script for Hamlet." (One may also hypothesize a small number of
   monkeys and a very long period of time.) This theorem asserts
   nothing about the intelligence of the one
```
                random
```

                         monkey that
    eventually comes up with the script (and note that the mob will
    also type out all the possible *incorrect* versions of
    Hamlet). It may be referred to semi-seriously when justifying a

                brute force
                 method; the implication is that, with enough
    resources thrown at it, any technical challenge becomes a

                one-banana problem
                 .

    This theorem was first popularized by the astronomer Sir Arthur
    Eddington. It became part of the idiom of techies via the classic
    SF short story "Inflexible Logic" by Russell Maloney, and
    many younger hackers know it through a reference in Douglas Adams's
    "Hitchhiker's Guide to the Galaxy".

infinity n. 1. The largest value that can be represented in
    a particular type of variable (register, memory location, data
    type, whatever). 2. 'minus infinity': The smallest such value,
    not necessarily or even usually the simple negation of plus
    infinity. In N-bit twos-complement arithmetic, infinity is
    $2^{(N-1)} - 1$ but minus infinity is -
    $(2^{(N-1)})$, not $-(2^{(N-1)} - 1)$. Note also that this
    is different from "time T equals minus infinity", which is
    closer to a mathematician's usage of infinity.

Infocom n. A now-legendary games company, active from 1979 to
    1989, that commercialized the MDL parser technology used for

                Zork
                 to produce a line of text adventure games that remain
    favorites among hackers. Infocom's games were intelligent, funny,
    witty, erudite, irreverent, challenging, satirical, and most
    thoroughly hackish in spirit. The physical game packages from
    Infocom are now prized collector's items. The software,
    thankfully, is still extant; Infocom games were written in a kind
    of P-code and distributed with a P-code interpreter core, and
    freeware emulators for that interpreter have been written to permit
    the P-code to be run on platforms the games never originally
    graced.

initgame /in-it'gaym/ n. [IRC] An
                IRC
                 version of the
    venerable trivia game "20 questions", in which one user changes
    his
                nick
                 to the initials of a famous person or other named
    entity, and the others on the channel ask yes or no questions, with
    the one to guess the person getting to be "it" next. As a
    courtesy, the one picking the initials starts by providing a
    4-letter hint of the form sex, nationality, life-status,
    reality-status. For example, MAAR means "Male, American, Alive,
    Real" (as opposed to "fictional"). Initgame can be surprisingly
    addictive. See also

```
                    hing
                    .
```

insanely great adj. [Mac community, from Steve Jobs; also
   BSD Unix people via Bill Joy] Something so incredibly
                    elegant
                       that it is imaginable only to someone possessing the most ←
                          puissant
   of
                    hacker
                    -natures.

INTERCAL /in't*r-kal/ n. [said by the authors to stand
   for 'Compiler Language With No Pronounceable Acronym'] A computer
   language designed by Don Woods and James Lyons in 1972. INTERCAL
   is purposely different from all other computer languages in all
   ways but one; it is purely a written language, being totally
   unspeakable. An excerpt from the INTERCAL Reference Manual will
   make the style of the language clear:

      It is a well-known and oft-demonstrated fact that a person whose
      work is incomprehensible is held in high esteem. For example, if
      one were to state that the simplest way to store a value of 65536
      in a 32-bit INTERCAL variable is:

          DO :1 <- #0$#256

      any sensible programmer would say that that was absurd. Since
      this is indeed the simplest method, the programmer would be made
      to look foolish in front of his boss, who would of course have
      happened to turn up, as bosses are wont to do. The effect would
      be no less devastating for the programmer having been correct.

   INTERCAL has many other peculiar features designed to make it even
   more unspeakable. The Woods-Lyons implementation was actually used
   by many (well, at least several) people at Princeton. The language
   has been recently reimplemented as C-INTERCAL and is consequently
   enjoying an unprecedented level of unpopularity; there is even an
   alt.lang.intercal newsgroup devoted to the study and ...
   appreciation of the language on Usenet.

interesting adj. In hacker parlance, this word has strong
   connotations of 'annoying', or 'difficult', or both. Hackers
   relish a challenge, and enjoy wringing all the irony possible out
   of the ancient Chinese curse "May you live in interesting times".
   Oppose
                    trivial
                    ,
                    uninteresting
                    .

Internet address n. 1. [techspeak] An absolute network
   address of the form foo@bar.baz, where foo is a user name, bar
   is a
                    sitename
                    , and baz is a 'domain' name, possibly

including periods itself. Contrast with
            bang path
            ; see also

            network, the
             and
            network address
            . All Internet machines
and most UUCP sites can now resolve these addresses, thanks to a
large amount of behind-the-scenes magic and PD software written
since 1980 or so. See also
            bang path
            ,
            domainist
            .
2. More loosely, any network address reachable through Internet;
this includes
            bang path
             addresses and some internal corporate
and government networks.

Reading Internet addresses is something of an art. Here are the
four most important top-level functional Internet domains followed
by a selection of geographical domains:

   com
        commercial organizations
   edu
        educational institutions
   gov
        U.S. government civilian sites
   mil
        U.S. military sites

Note that most of the sites in the com and edu domains are in
the U.S. or Canada.

   us
        sites in the U.S. outside the functional domains
   su
        sites in the ex-Soviet Union (see
            kremvax
).
   uk
        sites in the United Kingdom

Within the us domain, there are subdomains for the fifty
states, each generally with a name identical to the state's postal
abbreviation. Within the uk domain, there is an ac subdomain for
academic sites and a co domain for commercial ones. Other
top-level domains may be divided up in similar ways.

interrupt 1. [techspeak] n. On a computer, an event that
   interrupts normal processing and temporarily diverts
   flow-of-control through an "interrupt handler" routine. See also

            trap

             . 2. interj. A request for attention from a hacker.
   Often explicitly spoken. "Interrupt -- have you seen Joe
   recently?" See
             priority interrupt
             . 3. Under MS-DOS, nearly
   synonymous with 'system call', because the OS and BIOS routines
   are both called using the INT instruction (see

             interrupt list, the
) and because programmers so often have to
   bypass the OS (going directly to a BIOS interrupt) to get reasonable
   performance.

interrupt list, the n. [MS-DOS] The list of all known
   software interrupt calls (both documented and undocumented) for IBM
   PCs and compatibles, maintained and made available for free
   redistribution by Ralf Brown <ralf@cs.cmu.edu>. As of late
   1992, it had grown to approximately two megabytes in length.

interrupts locked out adj. When someone is ignoring you.
   In a restaurant, after several fruitless attempts to get the
   waitress's attention, a hacker might well observe "She must have
   interrupts locked out". The synonym 'interrupts disabled' is
   also common. Variations abound; "to have one's interrupt mask bit
   set" and "interrupts masked out" are also heard. See also

             spl
             .

IRC /I-R-C/ n. [Internet Relay Chat] A worldwide "party
   line" network that allows one to converse with others in real
   time. IRC is structured as a network of Internet servers, each of
   which accepts connections from client programs, one per user. The
   IRC community and the
             Usenet
              and
             MUD
              communities overlap
   to some extent, including both hackers and regular folks who have
   discovered the wonders of computer networks. Some Usenet jargon
   has been adopted on IRC, as have some conventions such as

             emoticon
             s. There is also a vigorous native jargon,
   represented in this lexicon by entries marked '[IRC]'. See also

             talk mode
             .

iron n. Hardware, especially older and larger hardware of

             mainframe
              class with big metal cabinets housing relatively
   low-density electronics (but the term is also used of modern
   supercomputers). Often in the phrase
             big iron
             . Oppose

silicon
. See also
dinosaur
.

Iron Age n. In the history of computing, 1961--1971 -- the
   formative era of commercial
                mainframe
                 technology, when
   ferrite-core
                dinosaur
                s ruled the earth. The Iron Age began,
   ironically enough, with the delivery of the first minicomputer (the
   PDP-1) and ended with the introduction of the first commercial
   microprocessor (the Intel 4004) in 1971. See also
                Stone Age
                ;
   compare
                elder days
                .

iron box n. [Unix/Internet] A special environment set up to
   trap a
                cracker
                 logging in over remote connections long enough
   to be traced. May include a modified
                shell
                 restricting the
   cracker's movements in unobvious ways, and 'bait' files designed
   to keep him interested and logged on. See also
                back door
                ,

                firewall machine
                ,
                Venus flytrap
                , and Clifford Stoll's
   account in "
                The Cuckoo's Egg
                " of how he made and used
   one (see the
                Bibliography
                 in Appendix C). Compare
                padded cell
                .

ironmonger n. [IBM] A hardware specialist (derogatory).
   Compare
                sandbender
                ,
                polygon pusher
                .

ISP /I-S-P/ Common abbreviation for Internet Service
   Provider, a kind of company that barely existed before 1993. ISPs
   sell Internet access to the mass market. While the big nationwide

commercial services with Internet access (like America Online,
CompuServe, GEnie, Netcom, etc.) are technically ISPs, the term is
usually reserved for local or regional small providers (often run
by hackers turned entrepreneurs) who resell Internet access cheaply
without themselves being information providers or selling
advertising.

ITS /I-T-S/ n.   1. Incompatible Time-sharing System, an
   influential but highly idiosyncratic operating system written for
   PDP-6s and PDP-10s at MIT and long used at the MIT AI Lab. Much
   AI-hacker jargon derives from ITS folklore, and to have been 'an
   ITS hacker' qualifies one instantly as an old-timer of the most
   venerable sort. ITS pioneered many important innovations,
   including transparent file sharing between machines and
   terminal-independent I/O. After about 1982, most actual work was
   shifted to newer machines, with the remaining ITS boxes run
   essentially as a hobby and service to the hacker community. The
   shutdown of the lab's last ITS machine in May 1990 marked the end
   of an era and sent old-time hackers into mourning nationwide (see

               high moby
). The Royal Institute of Technology in Sweden is
   maintaining one 'live' ITS site at its computer museum (right
   next to the only TOPS-10 system still on the Internet), so ITS is
   still alleged to hold the record for OS in longest continuous use
   (however,
               WAITS
                is a credible rival for this palm). 2. A
   mythical image of operating-system perfection worshiped by a
   bizarre, fervent retro-cult of old-time hackers and ex-users (see

               troglodyte
               , sense 2). ITS worshipers manage somehow to
   continue believing that an OS maintained by assembly-language
   hand-hacking that supported only monocase 6-character filenames in
   one directory per account remains superior to today's state of
   commercial art (their venom against Unix is particularly intense).
   See also
               holy wars
               ,
               Weenix
               .

IWBNI // Abbreviation for 'It Would Be Nice If'. Compare

               WIBNI
               .

IYFEG // [Usenet] Abbreviation for 'Insert Your Favorite
   Ethnic Group'. Used as a meta-name when telling ethnic jokes on
   the net to avoid offending anyone. See
               JEDR
               .

1.15 J

J. Random /J rand'm/ n. [generalized from
                          J. Random Hacker
                          ]
   Arbitrary; ordinary; any one; any old. 'J. Random' is
   often prefixed to a noun to make a name out of it. It means
   roughly 'some particular' or 'any specific one'. "Would you
   let J. Random Loser marry your daughter?" The most common uses
   are 'J. Random Hacker', 'J. Random Loser', and 'J. Random Nerd'
   ("Should J. Random Loser be allowed to
                          gun
                           down other
   people?"), but it can be used simply as an elaborate version of

                          random
                           in any sense.

J. Random Hacker /J rand'm hak'r/ n. [MIT] A mythical
   figure like the Unknown Soldier; the archetypal hacker nerd. See

                          random
                          ,
                          Suzie COBOL
                          . This may originally have been
   inspired by 'J. Fred Muggs', a show-biz chimpanzee whose name was a
   household word back in the early days of
                          TMRC
                          , and was
   probably influenced by 'J. Presper Eckert' (one of the co-inventors
   of the electronic computer).

jack in v. To log on to a machine or connect to a network
   or
                          BBS
                          , esp. for purposes of entering a
                          virtual reality
                             simulation such as a
                          MUD
                           or
                          IRC
                           (leaving is "jacking
   out"). This term derives from
                          cyberpunk
                           SF, in which it was
   used for the act of plugging an electrode set into neural sockets
   in order to interface the brain directly to a virtual reality. It
   is primarily used by MUD and IRC fans and younger hackers on BBS
   systems.

jaggies /jag'eez/ n. The 'stairstep' effect observable
   when an edge (esp. a linear edge of very shallow or steep slope)
   is rendered on a pixel device (as opposed to a vector display).

JCL /J-C-L/ n. 1. IBM's supremely
                          rude

            Job Control
   Language. JCL is the script language used to control the execution
   of programs in IBM's batch systems. JCL has a very
            fascist
              syntax, and some versions will, for example,
            barf
             if two
   spaces appear where it expects one. Most programmers confronted
   with JCL simply copy a working file (or card deck), changing the
   file names. Someone who actually understands and generates unique
   JCL is regarded with the mixed respect one gives to someone who
   memorizes the phone book. It is reported that hackers at IBM
   itself sometimes sing "Who's the breeder of the crud that mangles
   you and me? I-B-M, J-C-L, M-o-u-s-e" to the tune of the
   "Mickey Mouse Club" theme to express their opinion of the
   beast. 2. A comparative for any very
            rude
             software that a
   hacker is expected to use. "That's as bad as JCL." As with

            COBOL
            , JCL is often used as an archetype of ugliness even by
   those who haven't experienced it. See also
            IBM
            ,
            fear and loathing
            .

JEDR // n. Synonymous with
            IYFEG
            . At one time,
   people in the Usenet newsgroup rec.humor.funny tended to use
   'JEDR' instead of
            IYFEG
             or '<ethnic>'; this stemmed from a
   public attempt to suppress the group once made by a loser with
   initials JEDR after he was offended by an ethnic joke posted there.
   (The practice was
            retcon
            ned by the expanding these initials as
   'Joke Ethnic/Denomination/Race'.) After much sound and fury JEDR
   faded away; this term appears to be doing likewise. JEDR's only
   permanent effect on the net.culture was to discredit
   'sensitivity' arguments for censorship so thoroughly that more
   recent attempts to raise them have met with immediate and
   near-universal rejection.

JFCL /jif'kl/, /jaf'kl/, /j*-fi'kl/ vt., obs. (alt.
   'jfcl') To cancel or annul something. "Why don't you jfcl that
   out?" The fastest do-nothing instruction on older models of the
   PDP-10 happened to be JFCL, which stands for "Jump if Flag set and
   then CLear the flag"; this does something useful, but is a very
   fast no-operation if no flag is specified. Geoff Goodfellow, one
   of the jargon-1 co-authors, had JFCL on the license plate of his
   BMW for years. Usage: rare except among old-time PDP-10 hackers.

jiffy n. 1. The duration of one tick of the system clock on

the computer (see
                tick
). Often one AC cycle time (1/60 second
in the U.S. and Canada, 1/50 most other places), but more recently
1/100 sec has become common. "The swapper runs every 6 jiffies"
means that the virtual memory management routine is executed once
for every 6 ticks of the clock, or about ten times a second.
2. Confusingly, the term is sometimes also used for a 1-millisecond

                wall time
                 interval. Even more confusingly, physicists
semi-jokingly use 'jiffy' to mean the time required for light to
travel one foot in a vacuum, which turns out to be close to one
nanosecond. 3. Indeterminate time from a few seconds to
forever. "I'll do it in a jiffy" means certainly not now and
possibly never. This is a bit contrary to the more widespread use
of the word. Oppose
                nano
                . See also
                Real Soon Now
                .

job security n. When some piece of code is written in a
   particularly
                obscure
                 fashion, and no good reason (such as time
or space optimization) can be discovered, it is often said that the
programmer was attempting to increase his job security (i.e., by
making himself indispensable for maintenance). This sour joke
seldom has to be said in full; if two hackers are looking over some
code together and one points at a section and says "job
security", the other one may just nod.

jock n. 1. A programmer who is characterized by large and
   somewhat brute-force programs. See
                brute force
                . 2. When
   modified by another noun, describes a specialist in some particular
   computing area. The compounds 'compiler jock' and 'systems
   jock' seem to be the best-established examples.

joe code /joh' kohd'/ n. 1. Code that is overly

                tense
                 and unmaintainable. "
                Perl
                 may be a handy program,
   but if you look at the source, it's complete joe code." 2. Badly
   written, possibly buggy code.

   Correspondents wishing to remain anonymous have fingered a
   particular Joe at the Lawrence Berkeley Laboratory and observed
   that usage has drifted slightly; the original sobriquet 'Joe code'
   was intended in sense 1.

   1994 update: This term has now generalized to '<name> code', used
   to designate code with distinct characteristics traceable to its

author. "This section doesn't check for a NULL return from malloc!
Oh. No wonder! It's Ed code!". Used most often with a programmer
who has left the shop and thus is a convenient scapegoat for
anything that is wrong with the project.

jolix n. /joh'liks/ n.,adj. 386BSD, the freeware port of
the BSD Net/2 release to the Intel i386 architecture by Bill Jolitz
and friends. Used to differentiate from BSDI's port based on the
same source tape, which is called BSD/386. See
              BSD
              .

JR[LN] /J-R-L/, /J-R-N/ n. The names JRL and JRN were
sometimes used as example names when discussing a kind of user ID
used under
              TOPS-10
               and
              WAITS
              ; they were understood to be
the initials of (fictitious) programmers named 'J. Random Loser'
and 'J. Random Nerd' (see
              J. Random
). For example, if one
said "To log in, type log one comma jay are en" (that is, "log
1,JRN"), the listener would have understood that he should use his
own computer ID in place of 'JRN'.

JRST /jerst/ v.,obs. [based on the PDP-10 jump
instruction] To suddenly change subjects, with no intention of
returning to the previous topic. Usage: rather rare except among
PDP-10 diehards, and considered silly. See also
              AOS
              .

juggling eggs vi. Keeping a lot of
              state
               in your head
while modifying a program. "Don't bother me now, I'm juggling
eggs", means that an interrupt is likely to result in the
program's being scrambled. In the classic first-contact SF novel
"The Mote in God's Eye", by Larry Niven and Jerry Pournelle,
an alien describes a very difficult task by saying "We juggle
priceless eggs in variable gravity." See also
              hack mode
              .

jump off into never-never land v. [from J. M. Barrie's
"Peter Pan"] Same as
              branch to Fishkill
              , but more common
in technical cultures associated with non-IBM computers that use
the term 'jump' rather than 'branch'. Compare

              hyperspace
              .

jupiter vt. [IRC] To kill an

IRC

robot
or user
and then take its place by adopting its
nick
so that it cannot
reconnect. Named after a particular IRC user who did this to
NickServ, the robot in charge of preventing people from
inadvertently using a nick claimed by another user.

1.16   K

K /K/ n. [from
kilo-
] A kilobyte. Used both as a
spoken word and a written suffix (like
meg
and
gig
for
megabyte and gigabyte). See
quantifiers
.

K&R [Kernighan and Ritchie] n. Brian Kernighan and Dennis
Ritchie's book "The C Programming Language", esp. the
classic and influential first edition (Prentice-Hall 1978; ISBN
0-113-110163-3). Syn.
White Book
,
Old Testament
. See
also
New Testament
.

k- pref. Extremely. Not commonly used among hackers, but
quite common among crackers and
warez d00dz
in compounds such
as 'k-kool' /K'kool'/, 'k-rad' /K'rad'/, and
'k-awesome' /K'aw'sm/. Also used to intensify negatives; thus,
'k-evil', 'k-lame', 'k-screwed', and 'k-annoying'. Overuse
of this prefix, or use in more formal or technical contexts, is
considered an indicator of
lamer
status.

kahuna /k*-hoo'n*/ n. [IBM: from the Hawaiian title for a
shaman] Synonym for
wizard
,
guru

.

kamikaze packet n. The 'official' jargon for what is
   more commonly called a
                Christmas tree packet
                .
                RFC
                -1025,
   "TCP and IP Bake Off" says:

      10 points for correctly being able to process a "Kamikaze" packet
      (AKA nastygram, christmas tree packet, lamp test segment, et
      al.). That is, correctly handle a segment with the maximum
      combination of features at once (e.g., a SYN URG PUSH FIN segment
      with options and data).

   See also
                Chernobyl packet
                .

kangaroo code n. Syn.
                spaghetti code
                .

ken /ken/ n. 1. [Unix] Ken Thompson, principal inventor
   of Unix. In the early days he used to hand-cut distribution
   tapes, often with a note that read "Love, ken". Old-timers still
   use his first name (sometimes uncapitalized, because it's a login
   name and mail address) in third-person reference; it is widely
   understood (on Usenet, in particular) that without a last name
   'Ken' refers only to Ken Thompson. Similarly, Dennis without last
   name means Dennis Ritchie (and he is often known as dmr). See
   also
                demigod
                ,
                Unix
                . 2. A flaming user. This was
   originated by the Software Support group at Symbolics because the
   two greatest flamers in the user community were both named Ken.

kgbvax /K-G-B'vaks/ n. See
                kremvax
                .

KIBO /ki:'boh/ 1. [acronym] Knowledge In, Bullshit Out.
   A summary of what happens whenever valid data is passed through an
   organization (or person) that deliberately or accidentally
   disregards or ignores its significance. Consider, for example,
   what an advertising campaign can do with a product's actual
   specifications. Compare
                GIGO
                ; see also
                SNAFU principle
                .
   2. James Parry <kibo@world.std.com>, a Usenetter infamous for
   various surrealist net.pranks and an uncanny, machine-assisted
   knack for joining any thread in which his nom de guerre is

    mentioned.

kiboze v.   [Usenet] To
                grep
                 the Usenet news for a string,
   especially with the intention of posting a follow-up. This
   activity was popularised by Kibo (see
                KIBO
                , sense 2).

kick v.   [IRC] To cause somebody to be removed from a

                IRC
                 channel, an option only available to
                CHOP
                s. This is
   an extreme measure, often used to combat extreme
                flamage
                 or

                flood
                ing, but sometimes used at the chop's whim. Compare

                gun
                .

kill file n. [Usenet] (alt. 'KILL file') Per-user
   file(s) used by some
                Usenet
                 reading programs (originally Larry
   Wall's 'rn(1)') to discard summarily (without presenting for
   reading) articles matching some particularly uninteresting (or
   unwanted) patterns of subject, author, or other header lines. Thus
   to add a person (or subject) to one's kill file is to arrange for
   that person to be ignored by one's newsreader in future. By
   extension, it may be used for a decision to ignore the person or
   subject in other media. See also
                plonk
                .

killer micro n.   [popularized by Eugene Brooks] A
   microprocessor-based machine that infringes on mini, mainframe, or
   supercomputer performance turf. Often heard in "No one will
   survive the attack of the killer micros!", the battle cry of the
   downsizers. Used esp. of RISC architectures.

   The popularity of the phrase 'attack of the killer micros' is
   doubtless reinforced by the movie title "Attack Of The Killer
   Tomatoes" (one of the
                canonical
                 examples of
   so-bad-it's-wonderful among hackers). This has even more flavor
   now that killer micros have gone on the offensive not just
   individually (in workstations) but in hordes (within massively
   parallel computers).

   [1996 update: Eugene Brooks was right. Since this term first

```
   entered the Jargon File in 1990, the minicomputer has effectively
   vanished, the
               mainframe
                sector is in deep and apparently
   terminal decline (with IBM but a shadow of its former self), and
   even the supercomputer business has contracted into a smaller
   niche.  It's networked killer micros as far as the eye can see.
   --ESR]
```

killer poke n. A recipe for inducing hardware damage on a
   machine via insertion of invalid values (see
               poke
) into a
   memory-mapped control register; used esp. of various fairly
   well-known tricks on
               bitty box
               es without hardware memory
   management (such as the IBM PC and Commodore PET) that can overload
   and trash analog electronics in the monitor. See also
               HCF
               .

kilo- pref. [SI] See
               quantifiers
               .

KIPS /kips/ n. [abbreviation, by analogy with
               MIPS
                using
               K
               ] Thousands (*not* 1024s) of Instructions Per
   Second. Usage: rare.

KISS Principle /kis' prin'si-pl/ n. "Keep It Simple,
   Stupid". A maxim often invoked when discussing design to fend off

               creeping featurism
                and control development complexity.
   Possibly related to the
               marketroid
                maxim on sales
   presentations, "Keep It Short and Simple".

kit n. [Usenet; poss. fr. DEC slang for a full software
   distribution, as opposed to a patch or upgrade] A source
   software distribution that has been packaged in such a way that it
   can (theoretically) be unpacked and installed according to a series
   of steps using only standard Unix tools, and entirely documented by
   some reasonable chain of references from the top-level
               README file
               .
   The more general term
               distribution
                may imply that
   special tools or more stringent conditions on the host environment
   are required.

klone /klohn/ n. See
               clone
               , sense 4.

kludge 1. /klooj/ n. Incorrect (though regrettably
   common) spelling of
               kluge
               (US). These two words have been
   confused in American usage since the early 1960s, and widely
   confounded in Great Britain since the end of World War II.
   2. [TMRC] A
               crock
               that works. (A long-ago "Datamation"
   article by Jackson Granholme similarly said: "An ill-assorted
   collection of poorly matching parts, forming a distressing
   whole.") 3. v. To use a kludge to get around a problem. "I've
   kludged around it for now, but I'll fix it up properly later."

   This word appears to have derived from Scots 'kludge' or
   'kludgie' for a common toilet, via British military slang. It
   apparently became confused with U.S.
               kluge
               during or after
   World War II; some Britons from that era use both words in
   definably different ways, but
               kluge
               is now uncommon in Great
   Britain. 'Kludge' in Commonwealth hackish differs in meaning from
   'kluge' in that it lacks the positive senses; a kludge is something
   no Commonwealth hacker wants to be associated too closely with.
   Also, 'kludge' is more widely known in British mainstream slang
   than 'kluge' is in the U.S.

kluge /klooj/ [from the German 'klug', clever; poss
   related to Polish 'klucza', a trick or hook] 1. n. A Rube
   Goldberg (or Heath Robinson) device, whether in hardware or
   software. 2. n. A clever programming trick intended to solve a
   particular nasty case in an expedient, if not clear, manner. Often
   used to repair bugs. Often involves
               ad-hockery
               and verges on
   being a
               crock
               . 3. n. Something that works for the wrong
   reason. 4. vt. To insert a kluge into a program. "I've kluged
   this routine to get around that weird bug, but there's probably a
   better way." 5. [WPI] n. A feature that is implemented in a

               rude
               manner.

   Nowadays this term is often encountered in the variant spelling
   'kludge'. Reports from
               old fart
               s are consistent that
   'kluge' was the original spelling, reported around computers as
   far back as the mid-1950s and, at that time, used exclusively of

hardware kluges. In 1947, the "New York Folklore
Quarterly" reported a classic shaggy-dog story 'Murgatroyd the
Kluge Maker' then current in the Armed Forces, in which a 'kluge'
was a complex and puzzling artifact with a trivial function. Other
sources report that 'kluge' was common Navy slang in the WWII era
for any piece of electronics that worked well on shore but
consistently failed at sea.

However, there is reason to believe this slang use may be a decade
older. Several respondents have connected it to the brand name of
a device called a "Kluge paper feeder", an adjunct to mechanical
printing presses. Legend has it that the Kluge feeder was designed
before small, cheap electric motors and control electronics; it
relied on a fiendishly complex assortment of cams, belts, and
linkages to both power and synchronize all its operations from one
motive driveshaft. It was accordingly temperamental, subject to
frequent breakdowns, and devilishly difficult to repair -- but oh,
so clever! People who tell this story also aver that 'Kluge' was
virtualthe name of a design engineer.

There is in fact a Brandtjen & Kluge Inc., an old family business
that manufactures printing equipment -- interestingly, their name
is pronounced /kloo'gee/! Henry Brandtjen, president of the
firm, told me (ESR, 1994) that his company was co-founded by his
father and an engineer named Kluge /kloo'gee/, who built and
co-designed the original Kluge automatic feeder in 1919.
Mr. Brandtjen claims, however, that this was a *simple* device
(with only four cams); he says he has no idea how the myth of its
complexity took hold.

          TMRC
           and the MIT hacker culture of the early '60s seems to
have developed in a milieu that remembered and still used some WWII
military slang (see also
          foobar
). It seems likely that
'kluge' came to MIT via alumni of the many military electronics
projects that had been located in Cambridge (many in MIT's
venerable Building 20, in which
          TMRC
           is also located) during
the war.

The variant 'kludge' was apparently popularized by the

          Datamation
           article mentioned above; it was titled "How
to Design a Kludge" (February 1962, pp. 30, 31). This spelling was
probably imported from Great Britain, where
          kludge
           has an
independent history (though this fact was largely unknown to
hackers on either side of the Atlantic before a mid-1993 debate in
the Usenet group alt.folklore.computers over the First and
Second Edition versions of this entry; everybody used to think

                    kludge
                     was just a mutation of
                    kluge
). It now appears that
   the British, having forgotten the etymology of their own 'kludge'
   when 'kluge' crossed the Atlantic, repaid the U.S. by lobbing the
   'kludge' orthography in the other direction and confusing their
   American cousins' spelling!

   The result of this history is a tangle. Many younger U.S. hackers
   pronounce the word as /klooj/ but spell it, incorrectly for its
   meaning and pronunciation, as 'kludge'. British hackers mostly
   learned /kluhj/ orally and use it in a restricted negative sense
   and are at least consistent. European hackers have mostly learned
   the word from written American sources and tend to pronounce it
   /kluhj/ but use the wider American meaning!

   Some observers consider this mess appropriate in view of the word's
   meaning.

kluge around vt. To avoid a bug or difficult condition by
   inserting a
                    kluge
                    . Compare
                    workaround
                    .

kluge up vt. To lash together a quick hack to perform a
   task; this is milder than
                    cruft together
                     and has some of the
   connotations of
                    hack up
                     (note, however, that the construction
   'kluge on' corresponding to
                    hack on
                     is never used). "I've
   kluged up this routine to dump the buffer contents to a safe
   place."

Knights of the Lambda Calculus n. A semi-mythical
   organization of wizardly LISP and Scheme hackers. The name refers
   to a mathematical formalism invented by Alonzo Church, with which
   LISP is intimately connected. There is no enrollment list and the
   criteria for induction are unclear, but one well-known LISPer has
   been known to give out buttons and, in general, the *members*
   know who they are....

Knuth /knooth/ n. [Donald E. Knuth's "The Art of
   Computer Programming"] Mythically, the reference that answers all
   questions about data structures or algorithms. A safe answer when
   you do not know: "I think you can find that in Knuth." Contrast

                    literature, the
                    . See also
                    bible
                    .

kremvax /krem-vaks/ n. [from the then large number of

                Usenet

                VAXen
                 with names of the form foovax]
   Originally, a fictitious Usenet site at the Kremlin, announced on
   April 1, 1984 in a posting ostensibly originated there by Soviet
   leader Konstantin Chernenko. The posting was actually forged by
   Piet Beertema as an April Fool's joke. Other fictitious sites
   mentioned in the hoax were moskvax and
                kgbvax
                . This was
   probably the funniest of the many April Fool's forgeries
   perpetrated on Usenet (which has negligible security against them),
   because the notion that Usenet might ever penetrate the Iron
   Curtain seemed so totally absurd at the time.

   In fact, it was only six years later that the first genuine site in
   Moscow, demos.su, joined Usenet. Some readers needed
   convincing that the postings from it weren't just another prank.
   Vadim Antonov, senior programmer at Demos and the major poster from
   there up to mid-1991, was quite aware of all this, referred to it
   frequently in his own postings, and at one point twitted some
   credulous readers by blandly asserting that he *was* a
   hoax!

   Eventually he even arranged to have the domain's gateway site
   named kremvax, thus neatly turning fiction into fact
   and demonstrating that the hackish sense of humor transcends
   cultural barriers. [Mr. Antonov also contributed the
   Russian-language material for this lexicon. -- ESR]

   In an even more ironic historical footnote, kremvax became an
   electronic center of the anti-communist resistance during the
   bungled hard-line coup of August 1991. During those three days the
   Soviet UUCP network centered on kremvax became the only
   trustworthy news source for many places within the USSR. Though
   the sysops were concentrating on internal communications,
   cross-border postings included immediate transliterations of Boris
   Yeltsin's decrees condemning the coup and eyewitness reports of the
   demonstrations in Moscow's streets. In those hours, years of
   speculation that totalitarianism would prove unable to maintain its
   grip on politically-loaded information in the age of computer
   networking were proved devastatingly accurate -- and the original
   kremvax joke became a reality as Yeltsin and the new Russian
   revolutionaries of 'glasnost' and 'perestroika' made
   kremvax one of the timeliest means of their outreach to the
   West.

kyrka /shir'k*/ n. [Swedish] See
                feature key
                .

1.17 L

> lace card n.,obs. A
> punched card
> with all holes
punched (also called a 'whoopee card' or 'ventilator card').
Card readers tended to jam when they got to one of these, as the
resulting card had too little structural strength to avoid buckling
inside the mechanism. Card punches could also jam trying to
produce these things owing to power-supply problems. When some
practical joker fed a lace card through the reader, you needed to
clear the jam with a 'card knife' -- which you used on the joker
first.

lamer n. [prob. originated in skateboarder slang] Synonym
for
> luser
> , not used much by hackers but common among
> warez d00dz
> ,
crackers, and
> phreaker
> s. Oppose
> elite
> . Has the
same connotations of self-conscious elitism that use of
> luser
> does among hackers.

Crackers also use it to refer to cracker
> wannabee
> s. In phreak
culture, a lamer is one who scams codes off others rather than
doing cracks or really understanding the fundamental concepts. In

> warez d00dz
> culture, where the ability to wave around cracked
commercial software within days of (or before) release to the
commercial market is much esteemed, the lamer might try to upload
garbage or shareware or something incredibly old (old in this
context is read as a few years to anything older than 3
days).

language lawyer n. A person, usually an experienced or
senior software engineer, who is intimately familiar with many or
most of the numerous restrictions and features (both useful and
esoteric) applicable to one or more computer programming languages.
A language lawyer is distinguished by the ability to show you the
five sentences scattered through a 200-plus-page manual that
together imply the answer to your question "if only you had
thought to look there". Compare
> wizard
> ,
> legal
> ,

```
          legalese
          .
```

languages of choice n.
```
          C
          ,
          LISP
          , and
          Perl
          .
```
Nearly every hacker knows one of C or Lisp, and most good ones are
fluent in both. Over the last years, Perl has rapidly been gaining
favor, especially as a tool for systems-administration utilities
and rapid prototyping. Smalltalk and Prolog are also popular in
small but influential communities.

There is also a rapidly dwindling category of older hackers with
FORTRAN, or even assembler, as their language of choice. They
often prefer to be known as
```
          Real Programmer
          s, and other
```
hackers consider them a bit odd (see
"
```
          The Story of Mel, a Real Programmer
          " in Appendix A). Assembler
```
is generally no longer considered interesting or appropriate for
anything but
```
          HLL
           implementation,
          glue
          , and a few time-critical
```
and hardware-specific uses in systems programs. FORTRAN occupies a
shrinking niche in scientific programming.

Most hackers tend to frown on languages like
```
          Pascal
           and

          Ada
          , which don't give them the near-total freedom considered
```
necessary for hacking (see
```
          bondage-and-discipline language
          ),
```
and to regard everything even remotely connected with
```
          COBOL
           or
```
other traditional
```
          card walloper
           languages as a total and
```
unmitigated
```
          loss
          .
```

larval stage n. Describes a period of monomaniacal
   concentration on coding apparently passed through by all fledgling
   hackers. Common symptoms include the perpetration of more than one
   36-hour

```
                hacking run
                 in a given week; neglect of all other
   activities including usual basics like food, sleep, and personal
   hygiene; and a chronic case of advanced bleary-eye.  Can last from
   6 months to 2 years, the apparent median being around 18 months.  A
   few so afflicted never resume a more 'normal' life, but the
   ordeal seems to be necessary to produce really wizardly (as opposed
   to merely competent) programmers.  See also
                wannabee
                .  A less
   protracted and intense version of larval stage (typically lasting
   about a month) may recur when one is learning a new
                OS
                 or
   programming language.
```

lase /layz/ vt. To print a given document via a laser
   printer. "OK, let's lase that sucker and see if all those
   graphics-macro calls did the right things."

laser chicken n. Kung Pao Chicken, a standard Chinese dish
   containing chicken, peanuts, and hot red peppers in a spicy
   pepper-oil sauce. Many hackers call it 'laser chicken' for two
   reasons: It can
                zap
                 you just like a laser, and the sauce has a
   red color reminiscent of some laser beams.

   In a variation on this theme, it is reported that some Australian
   hackers have redesignated the common dish 'lemon chicken' as
   'Chernobyl Chicken'. The name is derived from the color of the
   sauce, which is considered bright enough to glow in the dark (as,
   mythically, do some of the inhabitants of Chernobyl).

Lasherism n. [Harvard] A program that solves a standard
   problem (such as the Eight Queens puzzle or implementing the

                life
                 algorithm) in a deliberately nonstandard way.
   Distinguished from a
                crock
                 or
                kluge
                 by the fact that the
   programmer did it on purpose as a mental exercise. Such
   constructions are quite popular in exercises such as the

                Obfuscated C Contest
                , and occasionally in
                retrocomputing
                .
   Lew Lasher was a student at Harvard around 1980 who became
   notorious for such behavior.

laundromat n. Syn.
                disk farm
                ; see

```
                          washing machine
                          .

LDB /l*'d*b/ vt.  [from the PDP-10 instruction set] To
   extract from the middle.  "LDB me a slice of cake, please."  This
   usage has been kept alive by Common LISP's function of the same
   name.  Considered silly.  See also
                          DPB
                          .

leaf site n.  A machine that merely originates and reads
   Usenet news or mail, and does not relay any third-party traffic.
   Often uttered in a critical tone; when the ratio of leaf sites to
   backbone, rib, and other relay sites gets too high, the network
   tends to develop bottlenecks.  Compare
                          backbone site
                          ,
                          rib site
                          .

leak n.  With qualifier, one of a class of
   resource-management bugs that occur when resources are not freed
   properly after operations on them are finished, so they effectively
   disappear (leak out).  This leads to eventual exhaustion as new
   allocation requests come in.
                          memory leak
                           and
                          fd leak
                             have their own entries; one might also refer, to, say, a '  ←
                                window
   handle leak' in a window system.

leaky heap n.   [Cambridge] An
                          arena
                           with a
                          memory leak
                          .

leapfrog attack n.  Use of userid and password information
   obtained illicitly from one host (e.g., downloading a file of
   account IDs and passwords, tapping TELNET, etc.) to compromise
   another host.  Also, the act of TELNETting through one or more
   hosts in order to confuse a trace (a standard cracker procedure).

leech n.  Among BBS types, crackers and
                          warez d00dz
                          ,
   one who consumes knowledge without generating new software, cracks
   or techniques.  BBS culture specifically defines a leech as someone
   who downloads files with few or no uploads in return, and who does
   not contribute to the message section.  Cracker culture extends
   this definition to someone (a
                          lamer
                          , usually) who constantly
   presses informed sources for information and/or assistance, but has
   nothing to contribute.
```

legal adj. Loosely used to mean 'in accordance with all the
    relevant rules', esp. in connection with some set of constraints
    defined by software. "The older =+ alternate for += is no longer
    legal syntax in ANSI C." "This parser processes each line of
    legal input the moment it sees the trailing linefeed." Hackers
    often model their work as a sort of game played with the
    environment in which the objective is to maneuver through the
    thicket of 'natural laws' to achieve a desired objective. Their
    use of 'legal' is flavored as much by this game-playing sense as
    by the more conventional one having to do with courts and lawyers.
    Compare
                language lawyer
                ,
                legalese
                .

legalese n. Dense, pedantic verbiage in a language
    description, product specification, or interface standard; text
    that seems designed to obfuscate and requires a
                language lawyer
                    to
                parse
                 it. Though hackers are not afraid of high
    information density and complexity in language (indeed, they rather
    enjoy both), they share a deep and abiding loathing for legalese;
    they associate it with deception,
                suit
                s, and situations in
    which hackers generally get the short end of the stick.

LER /L-E-R/ n. [TMRC, from 'Light-Emitting Diode'] A
    light-emitting resistor (that is, one in the process of burning
    up). Ohm's law was broken. See also
                SED
                .

LERP /lerp/ vi.,n. Quasi-acronym for Linear
    Interpolation, used as a verb or noun for the
    operation. "Bresenham's algorithm lerps incrementally between the
    two endpoints of the line."

let the smoke out v. To fry hardware (see
                fried
). See

                magic smoke
                 for a discussion of the underlying mythology.

letterbomb 1. n. A piece of
                email
                 containing
                live data
                   intended to do nefarious things to the recipient's machine or
    terminal. It is possible, for example, to send letterbombs that
    will lock up some specific kinds of terminals when they are viewed,
    so thoroughly that the user must cycle power (see
                cycle

                        , sense
   3) to unwedge them. Under Unix, a letterbomb can also try to get
   part of its contents interpreted as a shell command to the mailer.
   The results of this could range from silly to tragic. See also

                Trojan horse
                ; compare
                nastygram
                . 2. Loosely, a

                mailbomb
                .

lexer /lek'sr/ n. Common hacker shorthand for 'lexical
   analyzer', the input-tokenizing stage in the parser for a language
   (the part that breaks it into word-like pieces). "Some C lexers
   get confused by the old-style compound ops like '=-'."

lexiphage /lek'si-fayj'/ n. A notorious word
                chomper
                    on ITS. See
                bagbiter
                . This program would draw on a selected
   victim's bitmapped terminal the words "THE BAG" in ornate
   letters, followed a pair of jaws biting pieces of it off.

life n. 1. A cellular-automata game invented by John Horton
   Conway and first introduced publicly by Martin Gardner
   ("Scientific American", October 1970); the game's popularity
   had to wait a few years for computers on which it could reasonably
   be played, as it's no fun to simulate the cells by hand. Many
   hackers pass through a stage of fascination with it, and hackers at
   various places contributed heavily to the mathematical analysis of
   this game (most notably Bill Gosper at MIT, who even implemented
   life in
                TECO
                !; see
                Gosperism
). When a hacker mentions
   'life', he is much more likely to mean this game than the
   magazine, the breakfast cereal, or the human state of existence.
   2. The opposite of
                Usenet
                . As in "
                Get a life!
                "

Life is hard prov. [XEROX PARC] This phrase has two
   possible interpretations: (1) "While your suggestion may have some
   merit, I will behave as though I hadn't heard it." (2) "While
   your suggestion has obvious merit, equally obvious circumstances
   prevent it from being seriously considered." The charm of the
   phrase lies precisely in this subtle but important ambiguity.

light pipe n. Fiber optic cable. Oppose
                copper
                .

lightweight adj. Opposite of
              heavyweight
              ; usually
   found in combining forms such as 'lightweight process'.

like kicking dead whales down the beach adj. Describes a
   slow, difficult, and disgusting process. First popularized by a
   famous quote about the difficulty of getting work done under one of
   IBM's mainframe OSes. "Well, you *could* write a C compiler
   in COBOL, but it would be like kicking dead whales down the
   beach." See also
              fear and loathing
              .

like nailing jelly to a tree adj. Used to describe a task
   thought to be impossible, esp. one in which the difficulty arises
   from poor specification or inherent slipperiness in the problem
   domain. "Trying to display the 'prettiest' arrangement of
   nodes and arcs that diagrams a given graph is like nailing jelly to
   a tree, because nobody's sure what 'prettiest' means
   algorithmically."

   The hackers' use of this term may recall mainstream slang
   originated early in the 20th century by President Theodore
   Roosevelt. There is a legend that, weary of inconclusive talks
   with Colombia over the right to dig a canal through its
   then-province Panama, he remarked, "Negotiating with those pirates
   is like trying to nail currant jelly to the wall." Roosevelt's
   government subsequently encouraged the anti-Colombian insurgency
   that created the nation of Panama.

line 666 [from Christian eschatological myth] n. The
   notional line of source at which a program fails for obscure
   reasons, implying either that *somebody* is out to get it
   (when you are the programmer), or that it richly deserves to be so
   gotten (when you are not). "It works when I trace through it, but
   seems to crash on line 666 when I run it." "What happens is that
   whenever a large batch comes through, mmdf dies on the Line of the
   Beast. Probably some twit hardcoded a buffer size."

line eater, the n.,obs. [Usenet] 1. A bug in some
   now-obsolete versions of the netnews software that used to eat up
   to BUFSIZ bytes of the article text. The bug was triggered by
   having the text of the article start with a space or tab. This bug
   was quickly personified as a mythical creature called the 'line
   eater', and postings often included a dummy line of 'line eater
   food'. Ironically, line eater 'food' not beginning with a space
   or tab wasn't actually eaten, since the bug was avoided; but if
   there *was* a space or tab before it, then the line eater
   would eat the food *and* the beginning of the text it was
   supposed to be protecting. The practice of 'sacrificing to the
   line eater' continued for some time after the bug had been

              nailed to the wall
              , and is still humorously referred to. The
   bug itself was still occasionally reported to be lurking in some

    mail-to-netnews gateways as late as 1991. 2. See
                   NSA line eater
                   .

line noise n. 1. [techspeak] Spurious characters due to
   electrical noise in a communications link, especially an RS-232
   serial connection. Line noise may be induced by poor connections,
   interference or crosstalk from other circuits, electrical storms,

                   cosmic rays
                   , or (notionally) birds crapping on the phone
   wires. 2. Any chunk of data in a file or elsewhere that looks like
   the results of line noise in sense 1. 3. Text that is
   theoretically a readable text or program source but employs syntax
   so bizarre that it looks like line noise in senses 1 or 2. Yes,
   there are languages this ugly. The canonical example is
                   TECO
                   ;
   it is often claimed that "TECO's input syntax is indistinguishable
   from line noise." Other non-
                   WYSIWYG
                    editors, such as Multics
   'qed' and Unix 'ed', in the hands of a real hacker, also
   qualify easily, as do deliberately obfuscated languages such as

                   INTERCAL
                   .

line starve [MIT] 1. vi. To feed paper through a printer
   the wrong way by one line (most printers can't do this). On a
   display terminal, to move the cursor up to the previous line of the
   screen. "To print 'X squared', you just output 'X', line starve,
   '2', line feed." (The line starve causes the '2' to appear on the
   line above the 'X', and the line feed gets back to the original
   line.) 2. n. A character (or character sequence) that causes a
   terminal to perform this action. ASCII 0011010, also called SUB or
   control-Z, was one common line-starve character in the days before
   microcomputers and the X3.64 terminal standard. Unlike 'line
   feed', 'line starve' is *not* standard
                   ASCII
                    terminology. Even among hackers it is considered a bit silly.
   3. [proposed] A sequence such as \c (used in System V echo, as well
   as
                   nroff
                    and
                   troff
) that suppresses a
                   newline
                    or
   other character(s) that would normally be emitted.

linearithmic adj. Of an algorithm, having running time that
   is O(N log N). Coined as a portmanteau of 'linear' and
   'logarithmic' in "Algorithms In C" by Robert Sedgewick
   (Addison-Wesley 1990, ISBN 0-201-51425-7).

link farm n. [Unix] A directory tree that contains many

links to files in a master directory tree of files. Link farms
save space when one is maintaining several nearly identical copies
of the same source tree -- for example, when the only difference
is architecture-dependent object files. "Let's freeze the source
and then rebuild the FROBOZZ-3 and FROBOZZ-4 link farms." Link
farms may also be used to get around restrictions on the number of
'-I' (include-file directory) arguments on older C
preprocessors. However, they can also get completely out of hand,
becoming the filesystem equivalent of
                spaghetti code
                .

link-dead adj.   [MUD] Said of a
                MUD
                 character who has
    frozen in place because of a dropped Internet connection.

lint   [from Unix's 'lint(1)', named for the bits of
    fluff it supposedly picks from programs] 1. vt. To examine a
    program closely for style, language usage, and portability
    problems, esp. if in C, esp. if via use of automated analysis
    tools, most esp. if the Unix utility 'lint(1)' is used.
    This term used to be restricted to use of 'lint(1)' itself,
    but (judging by references on Usenet) it has become a shorthand for

                desk check
                 at some non-Unix shops, even in languages other
    than C. Also as v.
                delint
                . 2. n. Excess verbiage in a
    document, as in "This draft has too much lint".

Linux n. /li'nuks/, *not* /lee'nuks/ The free
    Unix workalike created by Linus Torvalds and friends starting about
    1990 (it's pronounced /li'nux/ because the name 'Linus' has a
    short i in Swedish). This may be the most remarkable hacker
    project in history -- an entire clone of Unix for 386, 486 and
    Pentium micros, distributed for free with sources over the net
    (ports to Alpha and Sparc-based machines are underway). This is
    what
                GNU
                 aimed to be, but the Free Software Foundation has not
    (as of early 1996) produced the kernel to go with its Unix toolset
    (which Linux uses). Other, similar efforts like FreeBSD and NetBSD
    have been much less successful. The secret of Linux's success may
    be that Linus worked much harder early on to keep the development
    process open and recruit other hackers, creating a snowball
    effect.

lion food n. [IBM] Middle management or HQ staff (or, by
    extension, administrative drones in general). From an old joke
    about two lions who, escaping from the zoo, split up to increase
    their chances but agree to meet after 2 months. When they finally
    meet, one is skinny and the other overweight. The thin one says:
    "How did you manage? I ate a human just once and they turned out
    a small army to chase me -- guns, nets, it was terrible. Since
    then I've been reduced to eating mice, insects, even grass." The

fat one replies: "Well, *I* hid near an IBM office and ate a
manager a day. And nobody even noticed!"

Lions Book n. "Source Code and Commentary on Unix
level 6", by John Lions. The two parts of this book contained (1)
the entire source listing of the Unix Version 6 kernel, and (2) a
commentary on the source discussing the algorithms. These were
circulated internally at the University of New South Wales
beginning 1976--77, and were, for years after, the *only*
detailed kernel documentation available to anyone outside Bell
Labs. Because Western Electric wished to maintain trade secret
status on the kernel, the Lions book was never formally published
and was only supposed to be distributed to affiliates of source
licensees (it is still possible to get a Bell Labs reprint of the
book by sending a copy of a V6 source license to the right person
at Bellcore, but *real* insiders have the UNSW edition). In
spite of this, it soon spread by samizdat to a good many of the
early Unix hackers.

LISP n. [from 'LISt Processing language', but mythically
from 'Lots of Irritating Superfluous Parentheses'] AI's mother
tongue, a language based on the ideas of (a) variable-length lists
and trees as fundamental data types, and (b) the interpretation of
code as data and vice-versa. Invented by John McCarthy at MIT in
the late 1950s, it is actually older than any other
                HLL
                 still
in use except FORTRAN. Accordingly, it has undergone considerable
adaptive radiation over the years; modern variants are quite
different in detail from the original LISP 1.5. The dominant HLL
among hackers until the early 1980s, LISP now shares the throne
with
                C
                . See
                languages of choice
                .

All LISP functions and programs are expressions that return
values; this, together with the high memory utilization of LISPs,
gave rise to Alan Perlis's famous quip (itself a take on an Oscar
Wilde quote) that "LISP programmers know the value of everything
and the cost of nothing".

One significant application for LISP has been as a proof by example
that most newer languages, such as
                COBOL
                 and
                Ada
                , are full
of unnecessary
                crock
                s. When the
                Right Thing
                 has already
been done once, there is no justification for
                bogosity
                 in newer

   languages.

literature, the n. Computer-science journals and other
   publications, vaguely gestured at to answer a question that the
   speaker believes is
                trivial
                . Thus, one might answer an
   annoying question by saying "It's in the literature." Oppose

                Knuth
                , which has no connotation of triviality.

lithium lick n. [NeXT] Steve Jobs. Employees who have
   gotten too much attention from their esteemed founder are said to
   have 'lithium lick' when they begin to show signs of Jobsian fervor
   and repeat the most recent catch phrases in normal conversation ---
   for example, "It just works, right out of the box!"

little-endian adj. Describes a computer architecture in
   which, within a given 16- or 32-bit word, bytes at lower addresses
   have lower significance (the word is stored 'little-end-first').
   The PDP-11 and VAX families of computers and Intel microprocessors
   and a lot of communications and networking hardware are
   little-endian. See
                big-endian
                ,
                middle-endian
                ,
                NUXI problem
                .
   The term is sometimes used to describe the ordering of
   units other than bytes; most often, bits within a byte.

live /li:v/ adj.,adv. Opposite of 'test'. Refers to
   actual real-world data or a program working with it. For example,
   the response to "I think the record deleter is finished." might
   be "Is it live yet?" "Have you tried it out on live data?"
   This usage usually carries the connotation that live data is more
   fragile and must not be corrupted, or bad things will happen. So a
   more appropriate response might be: "Well, make sure it works
   perfectly before we throw live data at it." The implication here
   is that record deletion is something pretty significant, and a
   haywire record-deleter running amok live would probably cause great
   harm.

live data n. 1. Data that is written to be interpreted and
   takes over program flow when triggered by some un-obvious
   operation, such as viewing it. One use of such hacks is to break
   security. For example, some smart terminals have commands that
   allow one to download strings to program keys; this can be used to
   write live data that, when listed to the terminal, infects it with
   a security-breaking
                virus
                 that is triggered the next time a
   hapless user strikes that key. For another, there are some
   well-known bugs in
                vi

                        that allow certain texts to send
   arbitrary commands back to the machine when they are simply viewed.
   2. In C code, data that includes pointers to function
                hook
                s
   (executable code). 3. An object, such as a
                trampoline
                , that
   is constructed on the fly by a program and intended to be executed
   as code.

Live Free Or Die! imp. 1. The state motto of New Hampshire,
   which appears on that state's automobile license plates. 2. A
   slogan associated with Unix in the romantic days when Unix
   aficionados saw themselves as a tiny, beleaguered underground
   tilting against the windmills of industry. The "free" referred
   specifically to freedom from the
                fascist
                 design philosophies
   and crufty misfeatures common on commercial operating systems.
   Armando Stettner, one of the early Unix developers, used to give
   out fake license plates bearing this motto under a large Unix, all
   in New Hampshire colors of green and white. These are now valued
   collector's items. Recently (1994) an inferior imitation of these
   has been put in circulation with a red corporate logo added.

livelock /li:v'lok/ n. A situation in which some critical
   stage of a task is unable to finish because its clients perpetually
   create more work for it to do after they have been serviced but
   before it can clear its queue. Differs from
                deadlock
                 in that
   the process is not blocked or waiting for anything, but has a
   virtually infinite amount of work to do and can never catch up.

liveware /li:v'weir/ n. 1. Synonym for
                wetware
                .
   Less common. 2. [Cambridge] Vermin. "Waiter, there's some
   liveware in my salad..."

lobotomy n. 1. What a hacker subjected to formal management
   training is said to have undergone. At IBM and elsewhere this term
   is used by both hackers and low-level management; the latter
   doubtless intend it as a joke. 2. The act of removing the
   processor from a microcomputer in order to replace or upgrade it.
   Some very cheap
                clone
                 systems are sold in 'lobotomized' form
   -- everything but the brain.

locals, the pl.n. The users on one's local network (as
   opposed, say, to people one reaches via public Internet or UUCP
   connects). The marked thing about this usage is how little it has
   to do with real-space distance. "I have to do some tweaking on
   this mail utility before releasing it to the locals."

locked and loaded adj. [from military slang for an M-16
   rifle with magazine inserted and prepared for firing] Said of a
   removable disk volume properly prepared for use -- that is, locked
   into the drive and with the heads loaded. Ironically, because
   their heads are 'loaded' whenever the power is up, this
   description is never used of
                Winchester
                 drives (which are
   named after a rifle).

locked up adj. Syn. for
                hung
                ,
                wedged
                .

logic bomb n. Code surreptitiously inserted into an
   application or OS that causes it to perform some destructive or
   security-compromising activity whenever specified conditions are
   met. Compare
                back door
                .

logical adj. [from the technical term 'logical device',
   wherein a physical device is referred to by an arbitrary
   'logical' name] Having the role of. If a person (say, Les
   Earnest at SAIL) who had long held a certain post left and were
   replaced, the replacement would for a while be known as the
   'logical' Les Earnest. (This does not imply any judgment on the
   replacement.) Compare
                virtual
                .

   At Stanford, 'logical' compass directions denote a coordinate
   system in which 'logical north' is toward San Francisco,
   'logical west' is toward the ocean, etc., even though logical
   north varies between physical (true) north near San Francisco and
   physical west near San Jose. (The best rule of thumb here is that,
   by definition, El Camino Real always runs logical north-and-south.)
   In giving directions, one might say: "To get to Rincon Tarasco
   restaurant, get onto
                El Camino Bignum
                 going logical north."
   Using the word 'logical' helps to prevent the recipient from
   worrying about that the fact that the sun is setting almost
   directly in front of him. The concept is reinforced by North
   American highways which are almost, but not quite, consistently
   labeled with logical rather than physical directions. A similar
   situation exists at MIT: Route 128 (famous for the electronics
   industry that has grown up along it) is a 3-quarters circle
   surrounding Boston at a radius of 10 miles, terminating near the
   coastline at each end. It would be most precise to describe the
   two directions along this highway as 'clockwise' and
   'counterclockwise', but the road signs all say "north" and
   "south", respectively. A hacker might describe these directions
   as 'logical north' and 'logical south', to indicate that they
   are conventional directions not corresponding to the usual

denotation for those words. (If you went logical south along the
entire length of route 128, you would start out going northwest,
curve around to the south, and finish headed due east, passing
along one infamous stretch of pavement that is simultaneously route
128 south and Interstate 93 north, and is signed as such!)

loop through vt. To process each element of a list of
things. "Hold on, I've got to loop through my paper mail."
Derives from the computer-language notion of an iterative loop;
compare 'cdr down' (under
               cdr
               ), which is less common among C
and Unix programmers. ITS hackers used to say 'IRP over' after
an obscure pseudo-op in the MIDAS PDP-10 assembler (the same IRP op
can nowadays be found in Microsoft's assembler).

loose bytes n. Commonwealth hackish term for the padding
bytes or
               shim
               s many compilers insert between members of a
record or structure to cope with alignment requirements imposed by
the machine architecture.

lord high fixer n. [primarily British, from Gilbert &
Sullivan's 'lord high executioner'] The person in an organization
who knows the most about some aspect of a system. See
               wizard
               .

lose [MIT] vi. 1. To fail. A program loses when it
encounters an exceptional condition or fails to work in the
expected manner. 2. To be exceptionally unesthetic or crocky.
3. Of people, to be obnoxious or unusually stupid (as opposed to
ignorant). See also
               deserves to lose
               . 4. n. Refers to
something that is
               losing
               , especially in the phrases "That's a
lose!" and "What a lose!"

lose lose interj. A reply to or comment on an undesirable
situation. "I accidentally deleted all my files!" "Lose,
lose."

loser n. An unexpectedly bad situation, program,
programmer, or person. Someone who habitually loses. (Even
winners can lose occasionally.) Someone who knows not and knows
not that he knows not. Emphatic forms are 'real loser', 'total
loser', and 'complete loser' (but not **'moby loser', which
would be a contradiction in terms). See
               luser
               .

losing adj. Said of anything that is or causes a
               lose
                  or

             lossage
             .

loss n. Something (not a person) that loses; a situation in
   which something is losing. Emphatic forms include 'moby loss',
   and 'total loss', 'complete loss'. Common interjections are
   "What a loss!" and "What a moby loss!" Note that 'moby
   loss' is OK even though **'moby loser' is not used; applied to an
   abstract noun, moby is simply a magnifier, whereas when applied to
   a person it implies substance and has positive connotations.
   Compare
             lossage
             .

lossage /los'*j/ n. The result of a bug or malfunction.
   This is a mass or collective noun. "What a loss!" and "What
   lossage!" are nearly synonymous. The former is slightly more
   particular to the speaker's present circumstances; the latter
   implies a continuing
             lose
              of which the speaker is currently a
   victim. Thus (for example) a temporary hardware failure is a loss,
   but bugs in an important tool (like a compiler) are serious
   lossage.

lost in the noise adj. Syn.
             lost in the underflow
             .
   This term is from signal processing, where signals of very small
   amplitude cannot be separated from low-intensity noise in the
   system. Though popular among hackers, it is not confined to
   hackerdom; physicists, engineers, astronomers, and statisticians
   all use it.

lost in the underflow adj. Too small to be worth
   considering; more specifically, small beyond the limits of accuracy
   or measurement. This is a reference to 'floating underflow', a
   condition that can occur when a floating-point arithmetic processor
   tries to handle quantities smaller than its limit of magnitude. It
   is also a pun on 'undertow' (a kind of fast, cold current that
   sometimes runs just offshore and can be dangerous to swimmers).
   "Well, sure, photon pressure from the stadium lights alters the
   path of a thrown baseball, but that effect gets lost in the
   underflow." Compare
             epsilon
             ,
             epsilon squared
             ; see also

             overflow bit
             .

lots of MIPS but no I/O adj. Used to describe a person who
   is technically brilliant but can't seem to communicate with human
   beings effectively. Technically it describes a machine that has
   lots of processing power but is bottlenecked on input-output (in
   1991, the IBM Rios, a.k.a. RS/6000, is a notorious recent example).

low-bandwidth adj. [from communication theory] Used to
   indicate a talk that, although not
               content-free
               , was not
   terribly informative. "That was a low-bandwidth talk, but what
   can you expect for an audience of
               suit
               s!" Compare

               zero-content
               ,
               bandwidth
               ,
               math-out
               .

LPT /L-P-T/ or /lip'it/ or /lip-it'/ n. Line printer,
   of course. Rare under Unix, more common among hackers who grew up
   with ITS, MS-DOS, CP/M and other operating systems that were
   strongly influenced by early DEC conventions.

Lubarsky's Law of Cybernetic Entomology prov. "There is
   always one more bug."

lunatic fringe n. [IBM] Customers who can be relied upon to
   accept release 1 versions of software.

lurker n. One of the 'silent majority' in a electronic
   forum; one who posts occasionally or not at all but is known to
   read the group's postings regularly. This term is not pejorative
   and indeed is casually used reflexively: "Oh, I'm just lurking."
   Often used in 'the lurkers', the hypothetical audience for the
   group's
               flamage
               -emitting regulars.

luser n. /loo'zr/ A
               user
               ; esp. one who is also a

               loser
               . (
               luser
                and
               loser
                are pronounced
   identically.) This word was coined around 1975 at MIT. Under
   ITS, when you first walked up to a terminal at MIT and typed
   Control-Z to get the computer's attention, it printed out some
   status information, including how many people were already using
   the computer; it might print "14 users", for example. Someone
   thought it would be a great joke to patch the system to print "14
   losers" instead. There ensued a great controversy, as some of the
   users didn't particularly want to be called losers to their faces
   every time they used the computer. For a while several hackers
   struggled covertly, each changing the message behind the back of

the others; any time you logged into the computer it was even money
whether it would say "users" or "losers". Finally, someone
tried the compromise "lusers", and it stuck. Later one of the
ITS machines supported 'luser' as a request-for-help command.
ITS died the death in mid-1990, except as a museum piece; the usage
lives on, however, and the term 'luser' is often seen in program
comments.

1.18   M

                   M pref. (on units) suff. (on numbers) [SI] See

                   quantifiers
                   .

macdink /mak'dink/ vt. [from the Apple Macintosh, which
   is said to encourage such behavior] To make many incremental and
   unnecessary cosmetic changes to a program or file. Often the
   subject of the macdinking would be better off without them. "When
   I left at 11 P.M. last night, he was still macdinking the
   slides for his presentation." See also
                   fritterware
                   ,

                   window shopping
                   .

machinable adj. Machine-readable. Having the
                   softcopy
                      nature.

machoflops /mach'oh-flops/ n. [pun on 'megaflops', a
   coinage for 'millions of FLoating-point Operations Per Second']
   Refers to artificially inflated performance figures often quoted by
   computer manufacturers. Real applications are lucky to get half
   the quoted speed. See
                   Your mileage may vary
                   ,
                   benchmark
                   .

Macintoy /mak'in-toy/ n. The Apple Macintosh, considered
   as a
                   toy
                   . Less pejorative than
                   Macintrash
                   .

Macintrash /mak'in-trash'/ n. The Apple Macintosh, as
   described by a hacker who doesn't appreciate being kept away from
   the *real computer* by the interface. The term
                   maggotbox
                      has been reported in regular use in the Research Triangle area ←
                         of

North Carolina. Compare
              Macintoy
              . See also
              beige toaster
              ,

              WIMP environment

              ,
              point-and-drool interface

              ,

              drool-proof paper

              ,
              user-friendly

              .

macro /mak'roh/ [techspeak] n. A name (possibly followed
   by a formal
              arg
               list) that is equated to a text or symbolic
   expression to which it is to be expanded (possibly with the
   substitution of actual arguments) by a macro expander. This
   definition can be found in any technical dictionary; what those
   won't tell you is how the hackish connotations of the term have
   changed over time.

   The term 'macro' originated in early assemblers, which encouraged
   the use of macros as a structuring and information-hiding device.
   During the early 1970s, macro assemblers became ubiquitous, and
   sometimes quite as powerful and expensive as
              HLL
              s, only to fall
   from favor as improving compiler technology marginalized assembler
   programming (see
              languages of choice
). Nowadays the term is
   most often used in connection with the C preprocessor, LISP, or one
   of several special-purpose languages built around a macro-expansion
   facility (such as TeX or Unix's [nt]roff suite).

   Indeed, the meaning has drifted enough that the collective
   'macros' is now sometimes used for code in any special-purpose
   application control language (whether or not the language is
   actually translated by text expansion), and for macro-like entities
   such as the 'keyboard macros' supported in some text editors
   (and PC TSR or Macintosh INIT/CDEV keyboard enhancers).

macro- pref. Large. Opposite of
              micro-
              . In the
   mainstream and among other technical cultures (for example, medical
   people) this competes with the prefix
              mega-
              , but hackers tend
   to restrict the latter to quantification.

macrology /mak-rol'*-jee/ n. 1. Set of usually complex or

crufty macros, e.g., as part of a large system written in

        LISP
        ,
        TECO
        , or (less commonly) assembler. 2. The art and
science involved in comprehending a macrology in sense 1.
Sometimes studying the macrology of a system is not unlike
archeology, ecology, or
        theology
        , hence the sound-alike
construction. See also
        boxology
        .

macrotape /mak'roh-tayp/ n. An industry-standard reel of
tape, as opposed to a
        microtape
        . See also
        round tape
        .

maggotbox /mag'*t-boks/ n. See
        Macintrash
        . This is
even more derogatory.

magic adj. 1. As yet unexplained, or too complicated to
explain; compare
        automagically
         and (Arthur C.) Clarke's Third
Law: "Any sufficiently advanced technology is indistinguishable
from magic." "TTY echoing is controlled by a large number of
magic bits." "This routine magically computes the parity of an
8-bit byte in three instructions." 2. Characteristic of something
that works although no one really understands why (this is
especially called
        black magic
). 3. [Stanford] A feature not
generally publicized that allows something otherwise impossible, or
a feature formerly in that category but now unveiled. Compare

        black magic
        ,
        wizardly
        ,
        deep magic
        ,
        heavy wizardry
        .

For more about hackish 'magic', see
        A Story About 'Magic'
           in Appendix A.

magic cookie n. [Unix] 1. Something passed between routines
or programs that enables the receiver to perform some operation; a

capability ticket or opaque identifier. Especially used of small
data objects that contain data encoded in a strange or
intrinsically machine-dependent way. E.g., on non-Unix OSes with a
non-byte-stream model of files, the result of 'ftell(3)' may
be a magic cookie rather than a byte offset; it can be passed to
'fseek(3)', but not operated on in any meaningful way. The
phrase 'it hands you a magic cookie' means it returns a result
whose contents are not defined but which can be passed back to the
same or some other program later. 2. An in-band code for changing
graphic rendition (e.g., inverse video or underlining) or
performing other control functions (see also

> cookie

). Some
older terminals would leave a blank on the screen corresponding to
mode-change magic cookies; this was also called a

> glitch

(or
occasionally a 'turd'; compare

> mouse droppings

). See also

> cookie

.

magic number n. [Unix/C] 1. In source code, some
non-obvious constant whose value is significant to the operation of
a program and that is inserted inconspicuously in-line
(

> hardcoded

), rather than expanded in by a symbol set by a
commented '#define'. Magic numbers in this sense are bad
style. 2. A number that encodes critical information used in an
algorithm in some opaque way. The classic examples of these are
the numbers used in hash or CRC functions, or the coefficients in a
linear congruential generator for pseudo-random numbers. This
sense actually predates and was ancestral to the more common sense
1. 3. Special data located at the beginning of a binary data file
to indicate its type to a utility. Under Unix, the system and
various applications programs (especially the linker) distinguish
between types of executable file by looking for a magic number.
Once upon a time, these magic numbers were PDP-11 branch
instructions that skipped over header data to the start of
executable code; 0407, for example, was octal for 'branch 16 bytes
relative'. Nowadays only a

> wizard

knows the spells to create
magic numbers. How do you choose a fresh magic number of your own?
Simple -- you pick one at random. See? It's magic!

The magic number, on the other hand, is 7+/-2. See
"The magical number seven, plus or minus two: some limits on
our capacity for processing information" by George Miller, in the
"Psychological Review" 63:81-97 (1956). This classic paper
established the number of distinct items (such as numeric digits)
that humans can hold in short-term memory. Among other things,
this strongly influenced the interface design of the phone system.

magic smoke n. A substance trapped inside IC packages that
    enables them to function (also called 'blue smoke'; this is
    similar to the archaic 'phlogiston' hypothesis about
    combustion). Its existence is demonstrated by what happens when a
    chip burns up -- the magic smoke gets let out, so it doesn't work
    any more. See
                smoke test
                ,
                let the smoke out
                .

    Usenetter Jay Maynard tells the following story: "Once, while
    hacking on a dedicated Z80 system, I was testing code by blowing
    EPROMs and plugging them in the system, then seeing what happened.
    One time, I plugged one in backwards. I only discovered that
    after I realized that Intel didn't put power-on lights under
    the quartz windows on the tops of their EPROMs -- the die was
    glowing white-hot. Amazingly, the EPROM worked fine after I erased
    it, filled it full of zeros, then erased it again. For all I know,
    it's still in service. Of course, this is because the magic smoke
    didn't get let out." Compare the original phrasing of
                Murphy's Law
                .

mail storm n. [from
                broadcast storm
                , influenced by
    'maelstrom'] What often happens when a machine with an Internet
    connection and active users re-connects after extended downtime ---
    a flood of incoming mail that brings the machine to its knees.

mailbomb (also mail bomb) [Usenet] 1. v. To send, or
    urge others to send, massive amounts of
                email
                 to a single
    system or person, esp. with intent to crash or
                spam
                 the
    recipient's system. Sometimes done in retaliation for a perceived
    serious offense. Mailbombing is itself widely regarded as a
    serious offense -- it can disrupt email traffic or other
    facilities for innocent users on the victim's system, and in
    extreme cases, even at upstream sites. 2. n. An automatic
    procedure with a similar effect. 3. n. The mail sent. Compare

                letterbomb
                ,
                nastygram
                ,
                BLOB
                 (sense 2).

mailing list n. (often shortened in context to 'list')
    1. An
                email
                 address that is an alias (or
                macro

, though
that word is never used in this connection) for many other email
addresses. Some mailing lists are simple 'reflectors',
redirecting mail sent to them to the list of recipients. Others
are filtered by humans or programs of varying degrees of
sophistication; lists filtered by humans are said to be
'moderated'. 2. The people who receive your email when you send
it to such an address.

Mailing lists are one of the primary forms of hacker interaction,
along with
                Usenet
                . They predate Usenet, having originated
with the first UUCP and ARPANET connections. They are often used
for private information-sharing on topics that would be too
specialized for or inappropriate to public Usenet groups. Though
some of these maintain almost purely technical content (such as the
Internet Engineering Task Force mailing list), others (like the
'sf-lovers' list maintained for many years by Saul Jaffe) are
recreational, and many are purely social. Perhaps the most
infamous of the social lists was the eccentric bandykin
distribution; its latter-day progeny, lectroids and
tanstaafl, still include a number of the oddest and most
interesting people in hackerdom.

Mailing lists are easy to create and (unlike Usenet) don't tie up a
significant amount of machine resources (until they get very large,
at which point they can become interesting torture tests for mail
software). Thus, they are often created temporarily by working
groups, the members of which can then collaborate on a project
without ever needing to meet face-to-face. Much of the material in
this lexicon was criticized and polished on just such a mailing
list (called 'jargon-friends'), which included all the co-authors
of Steele-1983.

main loop n. The top-level control flow construct in an
    input- or event-driven program, the one which receives and acts or
    dispatches on the program's input. See also
                driver
                .

mainframe n. Term originally referring to the cabinet
    containing the central processor unit or 'main frame' of a
    room-filling
                Stone Age
                batch machine. After the emergence of
    smaller 'minicomputer' designs in the early 1970s, the
    traditional
                big iron
                machines were described as 'mainframe
    computers' and eventually just as mainframes. The term carries the
    connotation of a machine designed for batch rather than interactive
    use, though possibly with an interactive timesharing operating
    system retrofitted onto it; it is especially used of machines built
    by IBM, Unisys, and the other great
                dinosaur
                s surviving from

    computing's
                Stone Age
                .

    It has been common wisdom among hackers since the late 1980s that
    the mainframe architectural tradition is essentially dead (outside
    of the tiny market for
                number-crunching
                 supercomputers (see

                cray
                )), having been swamped by the recent huge advances in IC
    technology and low-cost personal computing. As of 1993, corporate
    America is just beginning to figure this out -- the wave of
    failures, takeovers, and mergers among traditional mainframe makers
    have certainly provided sufficient omens (see
                dinosaurs mating
                  and
                killer micro
).

management n. 1. Corporate power elites distinguished
    primarily by their distance from actual productive work and their
    chronic failure to manage (see also
                suit
). Spoken derisively,
    as in "*Management* decided that ...". 2. Mythically, a
    vast bureaucracy responsible for all the world's minor irritations.
    Hackers' satirical public notices are often signed 'The Mgt'; this
    derives from the "Illuminatus" novels (see the

                Bibliography
                 in Appendix C).

mandelbug /man'del-buhg/ n. [from the Mandelbrot set] A
    bug whose underlying causes are so complex and obscure as to make
    its behavior appear chaotic or even non-deterministic. This term
    implies that the speaker thinks it is a
                Bohr bug
                , rather than
    a
                heisenbug
                . See also
                schroedinbug
                .

manged /mahnjd/ n. [probably from the French 'manger'
    or Italian 'mangiare', to eat; perhaps influenced by English
    'mange', 'mangy'] adj. Refers to anything that is mangled or
    damaged, usually beyond repair. "The disk was manged after the
    electrical storm." Compare
                mung
                .

mangle vt. Used similarly to
                mung
                 or

```
            scribble
            ,
   but more violent in its connotations; something that is mangled has
   been irreversibly and totally trashed.

mangler n.  [DEC] A manager.  Compare
            mango
            ; see also

            management
            .  Note that
            system mangler
             is somewhat
   different in connotation.

mango /mang'go/ n.  [orig. in-house jargon at Symbolics] A
   manager.  Compare
            mangler
            .  See also
            devo
             and
            doco
            .

manularity /man'yoo-la'ri-tee/ n.  [prob. fr. techspeak
   'manual' + 'granularity'] A notional measure of the manual
   labor required for some task, particularly one of the sort that
   automation is supposed to eliminate.  "Composing English on paper
   has much higher manularity than using a text editor, especially in
   the revising stage."  Hackers tend to consider manularity a
   symptom of primitive methods; in fact, a true hacker confronted
   with an apparent requirement to do a computing task
            by hand
               will inevitably seize the opportunity to build another tool ( ←
                 see

            toolsmith
            ).

marbles pl.n.  [from mainstream "lost all his/her
   marbles"] The minimum needed to build your way further up some
   hierarchy of tools or abstractions.  After a bad system crash, you
   need to determine if the machine has enough marbles to come up on
   its own, or enough marbles to allow a rebuild from backups, or if
   you need to rebuild from scratch.  "This compiler doesn't even
   have enough marbles to compile
            hello, world
            ."

marginal adj.  1. Extremely small.  "A marginal increase in

            core
             can decrease
            GC
             time drastically."  In everyday
   terms, this means that it is a lot easier to clean off your desk if
   you have a spare place to put some of the junk while you sort
```

through it. 2. Of extremely small merit. "This proposed new
feature seems rather marginal to me." 3. Of extremely small
probability of
               win
               ning. "The power supply was rather
marginal anyway; no wonder it fried."

Marginal Hacks n. Margaret Jacks Hall, a building into
   which the Stanford AI Lab was moved near the beginning of the 1980s
   (from the
               D. C. Power Lab
).

marginally adv. Slightly. "The ravs here are only
   marginally better than at Small Eating Place." See
               epsilon
               .

marketroid /mar'k*-troyd/ n. alt. 'marketing slime',
   'marketeer', 'marketing droid', 'marketdroid'. A member
   of a company's marketing department, esp. one who promises users
   that the next version of a product will have features that are not
   actually scheduled for inclusion, are extremely difficult to
   implement, and/or are in violation of the laws of physics; and/or
   one who describes existing features (and misfeatures) in ebullient,
   buzzword-laden adspeak. Derogatory. Compare
               droid
               .

Mars n. A legendary tragic failure, the archetypal Hacker
   Dream Gone Wrong. Mars was the code name for a family of PDP-10
   compatible computers built by Systems Concepts (now, The SC Group):
   the multi-processor SC-30M, the small uniprocessor SC-25M, and the
   never-built superprocessor SC-40M. These machines were marvels of
   engineering design; although not much slower than the unique

               Foonly
                F-1, they were physically smaller and consumed less
   power than the much slower DEC KS10 or Foonly F-2, F-3, or F-4
   machines. They were also completely compatible with the DEC KL10,
   and ran all KL10 binaries (including the operating system) with no
   modifications at about 2--3 times faster than a KL10.

   When DEC cancelled the Jupiter project in 1983, Systems Concepts
   should have made a bundle selling their machine into shops with a
   lot of software investment in PDP-10s, and in fact their spring
   1984 announcement generated a great deal of excitement in the
   PDP-10 world. TOPS-10 was running on the Mars by the summer of
   1984, and TOPS-20 by early fall. Unfortunately, the hackers
   running Systems Concepts were much better at designing machines
   than at mass producing or selling them; the company allowed itself
   to be sidetracked by a bout of perfectionism into continually
   improving the design, and lost credibility as delivery dates
   continued to slip. They also overpriced the product ridiculously;
   they believed they were competing with the KL10 and VAX 8600 and
   failed to reckon with the likes of Sun Microsystems and other
   hungry startups building workstations with power comparable to the

```
   KL10 at a fraction of the price.  By the time SC shipped the first
   SC-30M to Stanford in late 1985, most customers had already made
   the traumatic decision to abandon the PDP-10, usually for VMS or
   Unix boxes.  Most of the Mars computers built ended up being
   purchased by CompuServe.

   This tale and the related saga of
              Foonly
               hold a lesson for
   hackers: if you want to play in the
              Real World
              , you need to
   learn Real World moves.
```

martian n. A packet sent on a TCP/IP network with a source
   address of the test loopback interface [127.0.0.1]. This means
   that it will come back labeled with a source address that is
   clearly not of this earth. "The domain server is getting lots of
   packets from Mars. Does that gateway have a martian filter?"

massage vt. Vague term used to describe 'smooth'
   transformations of a data set into a different form, esp.
   transformations that do not lose information. Connotes less pain
   than
              munch
               or
              crunch
              . "He wrote a program that massages
   X bitmap files into GIF format." Compare
              slurp
              .

math-out n. [poss. from 'white-out' (the blizzard variety)]
   A paper or presentation so encrusted with mathematical or other
   formal notation as to be incomprehensible. This may be a device
   for concealing the fact that it is actually
              content-free
              . See
   also
              numbers
              ,
              social science number
              .

Matrix n. [FidoNet] 1. What the Opus BBS software and
   sysops call
              FidoNet
              . 2. Fanciful term for a
              cyberspace
                 expected to emerge from current networking experiments (see

              network, the
). 3. The totality of present-day computer
   networks.

maximum Maytag mode n. What a
              washing machine

                        or, by
   extension, any hard disk is in when it's being used so heavily that
   it's shaking like an old Maytag with an unbalanced load. If
   prolonged for any length of time, can lead to disks becoming

                walking drives
                .

Mbogo, Dr. Fred /*m-boh'goh, dok'tr fred/ n. [Stanford]
   The archetypal man you don't want to see about a problem, esp. an
   incompetent professional; a shyster. "Do you know a good eye
   doctor?" "Sure, try Mbogo Eye Care and Professional Dry
   Cleaning." The name comes from synergy between
                bogus
                 and the
   original Dr. Mbogo, a witch doctor who was Gomez Addams' physician
   on the old "Addams Family" TV show. Compare
                Bloggs Family, the
                ,
   see also
                fred
                .

meatware n. Synonym for
                wetware
                . Less common.

meeces /mees'*z/ n. [TMRC] Occasional furry visitors who
   are not
                urchin
                s. [That is, mice. This may no longer be in
   live use; it clearly derives from the refrain of the early-1960s
   cartoon character Mr. Jinx: "I hate meeces to *pieces*!" ---
   ESR]

meg /meg/ n. See
                quantifiers
                .

mega- /me'g*/ pref. [SI] See
                quantifiers
                .

megapenny /meg'*-pen'ee/ n. $10,000 (1 cent *
   10^6). Used semi-humorously as a unit in comparing computer
   cost and performance figures.

MEGO /me'goh/ or /mee'goh/ ['My Eyes Glaze Over', often
   'Mine Eyes Glazeth (sic) Over', attributed to the futurologist
   Herman Kahn] Also 'MEGO factor'. 1. n. A
                handwave
                 intended
   to confuse the listener and hopefully induce agreement because the
   listener does not want to admit to not understanding what is going
   on. MEGO is usually directed at senior management by engineers and
   contains a high proportion of
                TLA

s. 2. excl. An appropriate
response to MEGO tactics. 3. Among non-hackers, often refers not
to behavior that causes the eyes to glaze, but to the eye-glazing
reaction itself, which may be triggered by the mere threat of
technical detail as effectively as by an actual excess of it.

meltdown, network n. See
                network meltdown
                .

meme /meem/ n. [coined by analogy with 'gene', by
   Richard Dawkins] An idea considered as a
                replicator
                , esp.
   with the connotation that memes parasitize people into propagating
   them much as viruses do. Used esp. in the phrase 'meme
   complex' denoting a group of mutually supporting memes that form an
   organized belief system, such as a religion. This lexicon is an
   (epidemiological) vector of the 'hacker subculture' meme complex;
   each entry might be considered a meme. However, 'meme' is often
   misused to mean 'meme complex'. Use of the term connotes
   acceptance of the idea that in humans (and presumably other tool-
   and language-using sophonts) cultural evolution by selection of
   adaptive ideas has superseded biological evolution by selection of
   hereditary traits. Hackers find this idea congenial for tolerably
   obvious reasons.

meme plague n. The spread of a successful but pernicious

                meme
                , esp. one that parasitizes the victims into giving
   their all to propagate it. Astrology, BASIC, and the other guy's
   religion are often considered to be examples. This usage is given
   point by the historical fact that 'joiner' ideologies like
   Naziism or various forms of millennarian Christianity have
   exhibited plague-like cycles of exponential growth followed by
   collapses to small reservoir populations.

memetics /me-met'iks/ n. [from
                meme
                ] The study of
   memes. As of early 1996, this is still an extremely informal and
   speculative endeavor, though the first steps towards at least
   statistical rigor have been made by H. Keith Henson and others.
   Memetics is a popular topic for speculation among hackers, who like
   to see themselves as the architects of the new information
   ecologies in which memes live and replicate.

memory farts n. The flatulent sounds that some DOS box
   BIOSes (most notably AMI's) make when checking memory on bootup.

memory leak n. An error in a program's dynamic-store
   allocation logic that causes it to fail to reclaim discarded
   memory, leading to eventual collapse due to memory exhaustion.
   Also (esp. at CMU) called
                core leak
                . These problems were

severe on older machines with small, fixed-size address spaces, and
special "leak detection" tools were commonly written to root them
out. With the advent of virtual memory, it is unfortunately easier
to be sloppy about wasting a bit of memory (although when you run
out of memory on a VM machine, it means you've got a *real*
leak!). See

>   aliasing bug
>
> ,
>   fandango on core
>
> ,
>   smash the stack
>
> ,
>
>   precedence lossage
>
> ,
>   overrun screw
>
> ,
>   leaky heap
>
> ,
>   leak
>
> .

memory smash n. [XEROX PARC] Writing through a pointer that
    doesn't point to what you think it does. This occasionally reduces
    your machine to a rubble of bits. Note that this is subtly
    different from (and more general than) related terms such as a

>   memory leak
>   or
>   fandango on core
>   because it doesn't imply

    an allocation error or overrun condition.

menuitis /men`yoo-i:'tis/ n. Notional disease suffered by
    software with an obsessively simple-minded menu interface and no
    escape. Hackers find this intensely irritating and much prefer the
    flexibility of command-line or language-style interfaces,
    especially those customizable via macros or a special-purpose
    language in which one can encode useful hacks. See

>   user-obsequious
>
> ,
>   drool-proof paper
>
> ,
>   WIMP environment
>
> ,
>
>   for the rest of us
>
> .

mess-dos /mes-dos/ n. Derisory term for MS-DOS. Often
    followed by the ritual banishing "Just say No!" See

>   MS-DOS
>   . Most hackers (even many MS-DOS hackers) loathe

    MS-DOS for its single-tasking nature, its limits on application
    size, its nasty primitive interface, and its ties to IBMness (see

                    fear and loathing
). Also 'mess-loss', 'messy-dos',
    'mess-dog', 'mess-dross', 'mush-dos', and various
    combinations thereof. In Ireland and the U.K. it is even sometimes
    called 'Domestos' after a brand of toilet cleanser.

meta /me't*/ or /may't*/ or (Commonwealth) /mee't*/ adj.,pref.
    [from analytic philosophy] One level of
    description up. A metasyntactic variable is a variable in notation
    used to describe syntax, and meta-language is language used to
    describe language. This is difficult to explain briefly, but much
    hacker humor turns on deliberate confusion between meta-levels.
    See
                    Humor, Hacker
                    .

meta bit n. The top bit of an 8-bit character, which is on
    in character values 128--255. Also called
                    high bit
                    ,

                    alt bit
                    , or
                    hobbit
                    . Some terminals and consoles (see

                    space-cadet keyboard
) have a META shift key. Others
    (including, *mirabile dictu*, keyboards on IBM PC-class
    machines) have an ALT key. See also
                    bucky bits
                    .

    Historical note: although in modern usage shaped by a universe of
    8-bit bytes the meta bit is invariably hex 80 (octal 0200), things
    were different on earlier machines with 36-bit words and 9-bit
    bytes. The MIT and Stanford keyboards (see
                    space-cadet keyboard
)
    generated hex 100 (octal 400) from their meta keys.

metasyntactic variable n. A name used in examples and
    understood to stand for whatever thing is under discussion, or any
    random member of a class of things under discussion. The word

                    foo
                     is the
                    canonical
                     example. To avoid confusion,
    hackers never (well, hardly ever) use 'foo' or other words like
    it as permanent names for anything. In filenames, a common
    convention is that any filename beginning with a
    metasyntactic-variable name is a
                    scratch
                     file that may be
    deleted at any time.

To some extent, the list of one's preferred metasyntactic variables
is a cultural signature. They occur both in series (used for
related groups of variables or objects) and as singletons. Here
are a few common signatures:

            foo
            ,
            bar
            ,
            baz
            ,
            quux
            , quuux, quuuux...:
      MIT/Stanford usage, now found everywhere (thanks largely to
      early versions of this lexicon!). At MIT (but not at
      Stanford),
            baz
             dropped out of use for a while in the 1970s
      and '80s. A common recent mutation of this sequence inserts

            qux
             before
            quux
            .
  bazola, ztesch:
      Stanford (from mid-'70s on).

            foo
            ,
            bar
            , thud, grunt:
      This series was popular at CMU. Other CMU-associated
      variables include
            gorp
            .

            foo
            ,
            bar
            , fum:
      This series is reported to be common at XEROX PARC.

            fred
            ,
            barney
            :
      See the entry for
            fred
            . These tend to be Britishisms.

            corge
            ,
            grault
            ,
            flarp

```
          :
     Popular at Rutgers University and among
          GOSMACS
           hackers.
  zxc, spqr, wombat:
     Cambridge University (England).
  shme
     Berkeley, GeoWorks, Ingres.  Pronounced /shme/ with a short
     /e/.


          foo
          ,
          bar
          , zot
     Helsinki University of Technology, Finland.
  blarg, wibble
     New Zealand.
  toto, titi, tata, tutu
     France.
  pippo, pluto, paperino
     Italy.  Pippo /pee'po/ and Paperino /pa-per-ee'-no/ are the
     Italian names for Goofy and Donald Duck.
  aap, noot, mies
     The Netherlands.  These are the first words a child used to
     learn to spell on a Dutch spelling board.


Of all these, only 'foo' and 'bar' are universal (and
          baz
            nearly so).  The compounds
          foobar
           and 'foobaz' also enjoy
very wide currency.


Some jargon terms are also used as metasyntactic names;
          barf
             and
          mumble
          , for example.  See also
          Commonwealth Hackish
            for discussion of numerous metasyntactic variables found in  ↩
               Great
Britain and the Commonwealth.
```

MFTL /M-F-T-L/ [abbreviation: 'My Favorite Toy Language']
   1. adj. Describes a talk on a programming language design that is
   heavy on the syntax (with lots of BNF), sometimes even talks about
   semantics (e.g., type systems), but rarely, if ever, has any
   content (see
          content-free
). More broadly applied to talks ---
   even when the topic is not a programming language -- in which the
   subject matter is gone into in unnecessary and meticulous detail at
   the sacrifice of any conceptual content. "Well, it was a typical
   MFTL talk". 2. n. Describes a language about which the developers
   are passionate (often to the point of prosyletic zeal) but no one
   else cares about. Applied to the language by those outside the
   originating group. "He cornered me about type resolution in his

MFTL."

The first great goal in the mind of the designer of an MFTL is
usually to write a compiler for it, then bootstrap the design away
from contamination by lesser languages by writing a compiler for it
in itself. Thus, the standard put-down question at an MFTL talk is
"Has it been used for anything besides its own compiler?". On
the other hand, a language that cannot even be used to write
its own compiler is beneath contempt. See

     break-even point

     .

(On a related note, Doug McIlroy once proposed a test of the
generality and utility of a language and the operating system under
which it is compiled: "Is the output of a FORTRAN program
acceptable as input to the FORTRAN compiler?" In other words, can
you write programs that write programs? (See

     toolsmith

     .)

Alarming numbers of (language, OS) pairs fail this test,
particularly when the language is FORTRAN; aficionados are quick to
point out that

     Unix

      (even using FORTRAN) passes it handily.

That the test could ever be failed is only surprising to those who
have had the good fortune to have worked only under modern systems
which lack OS-supported and -imposed "file types".)

mickey n. The resolution unit of mouse movement. It has
been suggested that the 'disney' will become a benchmark unit for
animation graphics performance.

mickey mouse program n. North American equivalent of a

     noddy

      (that is, trivial) program. Doesn't necessarily have
the belittling connotations of mainstream slang "Oh, that's just
mickey mouse stuff!"; sometimes trivial programs can be very
useful.

micro- pref. 1. Very small; this is the root of its use as
a quantifier prefix. 2. A quantifier prefix, calling for
multiplication by 10^{-6} (see

     quantifiers

).

Neither of these uses is peculiar to hackers, but hackers tend to
fling them both around rather more freely than is countenanced in
standard English. It is recorded, for example, that one CS
professor used to characterize the standard length of his lectures
as a microcentury -- that is, about 52.6 minutes (see also

     attoparsec

     ,

     nanoacre

     , and especially

     microfortnight

). 3. Personal or human-scale -- that is,
capable of being maintained or comprehended or manipulated by one
human being. This sense is generalized from 'microcomputer',
and is esp. used in contrast with 'macro-' (the corresponding
Greek prefix meaning 'large'). 4. Local as opposed to global (or

                macro-
). Thus a hacker might say that buying a smaller car to
reduce pollution only solves a microproblem; the macroproblem of
getting to work might be better solved by using mass transit,
moving to within walking distance, or (best of all) telecommuting.

MicroDroid n.   [Usenet] A Microsoft employee, esp. one who
    posts to various operating-system advocacy newsgroups. MicroDroids
    post follow-ups to any messages critical of Microsoft's operating
    systems, and often end up sounding like visiting Mormon
    missionaries.

microfloppies n. 3.5-inch floppies, as opposed to 5.25-inch

                vanilla
                 or mini-floppies and the now-obsolete 8-inch variety.
    This term may be headed for obsolescence as 5.25-inchers pass out
    of use, only to be revived if anybody floats a sub-3-inch floppy
    standard. See
                stiffy
                ,
                minifloppies
                .

microfortnight n. 1/1000000 of the fundamental unit of time
    in the Furlong/Firkin/Fortnight system of measurement; 1.2096 sec.
    (A furlong is 1/8th of a mile; a firkin is 1/4th of a barrel; the
    mass unit of the system is taken to be a firkin of water). The VMS
    operating system has a lot of tuning parameters that you can set
    with the SYSGEN utility, and one of these is TIMEPROMPTWAIT, the
    time the system will wait for an operator to set the correct date
    and time at boot if it realizes that the current value is bogus.
    This time is specified in microfortnights!

    Multiple uses of the millifortnight (about 20 minutes) and

                nanofortnight
                 have also been reported.

microLenat /mi:'-kroh-len'-*t/ n. The unit of

                bogosity
                , written uL; the consensus is that this is
    the largest unit practical for everyday use. The microLenat,
    originally invented by David Jefferson, was promulgated as an
    attack against noted computer scientist Doug Lenat by a

                tenured graduate student
                 at CMU. Doug had failed the student on
    an important exam for giving only "AI is bogus" as his answer to
    the questions. The slur is generally considered unmerited, but it

   has become a running gag nevertheless. Some of Doug's friends argue
   that *of course* a microLenat is bogus, since it is only one
   millionth of a Lenat. Others have suggested that the unit should
   be redesignated after the grad student, as the microReid.

microReid /mi:'kroh-reed/ n. See
               bogosity
               .

Microsloth Windows /mi:'kroh-sloth` win'dohz/ n.
   Hackerism for 'Microsoft Windows', a windowing system for the
   IBM-PC which is so limited by bug-for-bug compatibility with

               mess-dos
                that it is agonizingly slow on anything less than a
   fast 486. Also just called 'Windoze', with the implication that
   you can fall asleepm waiting for it to do anything; the latter term
   is extremely common on Usenet. Compare
               X
               ,
               sun-stools
               .

microtape /mi:'kroh-tayp/ n. Occasionally used to mean a
   DECtape, as opposed to a
               macrotape
               . A DECtape is a small
   reel, about 4 inches in diameter, of magnetic tape about an inch
   wide. Unlike those for today's
               macrotape
               s, microtape drivers
   allowed random access to the data, and therefore could be used to
   support file systems and even for swapping (this was generally done
   purely for
               hack value
               , as they were far too slow for practical
   use). In their heyday they were used in pretty much the same ways
   one would now use a floppy disk: as a small, portable way to save
   and transport files and programs. Apparently the term
   'microtape' was actually the official term used within DEC for
   these tapes until someone coined the word 'DECtape', which, of
   course, sounded sexier to the
               marketroid
               s; another version of
   the story holds that someone discovered a conflict with another
   company's 'microtape' trademark.

middle-endian adj. Not
               big-endian
                or

               little-endian
               . Used of perverse byte orders such as 3-4-1-2
   or 2-1-4-3, occasionally found in the packed-decimal formats of
   minicomputer manufacturers who shall remain nameless. See

               NUXI problem

. Non-US hackers use this term to describe the
American mm/dd/yy style of writing dates.

milliLampson /mil'*-lamp'sn/ n. A unit of talking speed,
abbreviated mL. Most people run about 200 milliLampsons. The
eponymous Butler Lampson (a CS theorist and systems implementor
highly regarded among hackers) goes at 1000. A few people speak
faster. This unit is sometimes used to compare the (sometimes
widely disparate) rates at which people can generate ideas and
actually emit them in speech. For example, noted computer
architect C. Gordon Bell (designer of the PDP-11) is said, with
some awe, to think at about 1200 mL but only talk at about 300; he
is frequently reduced to fragments of sentences as his mouth tries
to keep up with his speeding brain.

minifloppies n. 5.25-inch
                vanilla
                 floppy disks, as
opposed to 3.5-inch or
                microfloppies
                 and the now-obsolescent
8-inch variety. At one time, this term was a trademark of Shugart
Associates for their SA-400 minifloppy drive. Nobody paid any
attention. See
                stiffy
                .

MIPS /mips/ n. [abbreviation] 1. A measure of computing
speed; formally, 'Million Instructions Per Second' (that's
10^6 per second, not 2^(20)!); often rendered by
hackers as 'Meaningless Indication of Processor Speed' or in
other unflattering ways. This joke expresses a nearly universal
attitude about the value of most
                benchmark
                 claims, said
attitude being one of the great cultural divides between hackers
and
                marketroid
                s. The singular is sometimes '1 MIP' even
though this is clearly etymologically wrong. See also
                KIPS
                    and
                GIPS
                . 2. Computers, especially large computers,
considered abstractly as sources of
                computron
                s. "This is
just a workstation; the heavy MIPS are hidden in the basement."
3. The corporate name of a particular RISC-chip company; among
other things, they designed the processor chips used in DEC's 3100
workstation series. 4. Acronym for 'Meaningless Information per
Second' (a joke, prob. from sense 1).

misbug /mis-buhg/ n. [MIT] An unintended property of a
program that turns out to be useful; something that should have
been a
                bug

```
                but turns out to be a
                feature
                .  Usage: rare.
   Compare

                green lightning
                .  See
                miswart
                .
```

misfeature /mis-fee'chr/ or /mis'fee`chr/ n. A feature
   that eventually causes lossage, possibly because it is not adequate
   for a new situation that has evolved. Since it results from a
   deliberate and properly implemented feature, a misfeature is not a
   bug. Nor is it a simple unforeseen side effect; the term implies
   that the feature in question was carefully planned, but its
   long-term consequences were not accurately or adequately predicted
   (which is quite different from not having thought ahead at all). A
   misfeature can be a particularly stubborn problem to resolve,
   because fixing it usually involves a substantial philosophical
   change to the structure of the system involved.

   Many misfeatures (especially in user-interface design) arise
   because the designers/implementors mistake their personal tastes
   for laws of nature. Often a former feature becomes a misfeature
   because trade-offs were made whose parameters subsequently change
   (possibly only in the judgment of the implementors). "Well, yeah,
   it is kind of a misfeature that file names are limited to six
   characters, but the original implementors wanted to save directory
   space and we're stuck with it for now."

Missed'em-five n. Pejorative hackerism for AT&T System V
   Unix, generally used by
                BSD
                 partisans in a bigoted mood. (The
   synonym 'SysVile' is also encountered.) See
                software bloat
                ,

                Berzerkeley
                .

missile address n. See
                ICBM address
                .

miswart /mis-wort/ n. [from
                wart
                 by analogy with

                misbug
                ] A
                feature
                 that superficially appears to be a

                wart
                 but has been determined to be the
                Right Thing

                         .   For
     example, in some versions of the
                     EMACS
                      text editor, the
     'transpose characters' command exchanges the character under the
     cursor with the one before it on the screen, *except* when the
     cursor is at the end of a line, in which case the two characters
     before the cursor are exchanged. While this behavior is perhaps
     surprising, and certainly inconsistent, it has been found through
     extensive experimentation to be what most users want. This feature
     is a miswart.

moby /moh'bee/ [MIT: seems to have been in use among
     model railroad fans years ago. Derived from Melville's "Moby
     Dick" (some say from 'Moby Pickle').] 1. adj. Large, immense,
     complex, impressive. "A Saturn V rocket is a truly moby frob."
     "Some MIT undergrads pulled off a moby hack at the Harvard-Yale
     game." (See "
                     The Meaning of 'Hack'
                     ").
     2. n. obs. The maximum address space of a machine (see below). For
     a 680[234]0 or VAX or most modern 32-bit architectures, it is
     4,294,967,296 8-bit bytes (4 gigabytes). 3. A title of address
     (never of third-person reference), usually used to show admiration,
     respect, and/or friendliness to a competent hacker. "Greetings,
     moby Dave. How's that address-book thing for the Mac going?"
     4. adj. In backgammon, doubles on the dice, as in 'moby sixes',
     'moby ones', etc. Compare this with
                     bignum
                      (sense 3):
     double sixes are both bignums and moby sixes, but moby ones are not
     bignums (the use of 'moby' to describe double ones is sarcastic).
     Standard emphatic forms: 'Moby foo', 'moby win', 'moby loss'.
     'Foby moo': a spoonerism due to Richard Greenblatt. 5. The
     largest available unit of something which is available in discrete
     increments. Thus, ordering a "moby Coke" at the local fast-food
     joint is not just a request for a large Coke, it's an explicit
     request for the largest size they sell.

     This term entered hackerdom with the Fabritek 256K memory added to
     the MIT AI PDP-6 machine, which was considered unimaginably huge
     when it was installed in the 1960s (at a time when a more typical
     memory size for a timesharing system was 72 kilobytes). Thus, a
     moby is classically 256K 36-bit words, the size of a PDP-6 or
     PDP-10 moby. Back when address registers were narrow the term was
     more generally useful, because when a computer had virtual memory
     mapping, it might actually have more physical memory attached to it
     than any one program could access directly. One could then say
     "This computer has 6 mobies" meaning that the ratio of physical
     memory to address space is 6, without having to say specifically
     how much memory there actually is. That in turn implied that the
     computer could timeshare six 'full-sized' programs without having
     to swap programs between memory and disk.

     Nowadays the low cost of processor logic means that address spaces
     are usually larger than the most physical memory you can cram onto
     a machine, so most systems have much *less* than one

theoretical 'native' moby of
              core
              . Also, more modern
   memory-management techniques (esp. paging) make the 'moby
   count' less significant. However, there is one series of
   widely-used chips for which the term could stand to be revived ---
   the Intel 8088 and 80286 with their incredibly
              brain-damaged
              segmented-memory designs. On these, a 'moby' would be the
   1-megabyte address span of a segment/offset pair (by coincidence, a
   PDP-10 moby was exactly 1 megabyte of 9-bit bytes).

mockingbird n. Software that intercepts communications
   (especially login transactions) between users and hosts and
   provides system-like responses to the users while saving their
   responses (especially account IDs and passwords). A special case
   of
              Trojan horse
              .

mod vt.,n. 1. Short for 'modify' or 'modification'.
   Very commonly used -- in fact the full terms are considered
   markers that one is being formal. The plural 'mods' is used
   esp. with reference to bug fixes or minor design changes in
   hardware or software, most esp. with respect to
              patch
               sets
   or a
              diff
              . 2. Short for
              modulo
               but used *only* for
   its techspeak sense.

mode n. A general state, usually used with an adjective
   describing the state. Use of the word 'mode' rather than
   'state' implies that the state is extended over time, and
   probably also that some activity characteristic of that state is
   being carried out. "No time to hack; I'm in thesis mode." In its
   jargon sense, 'mode' is most often attributed to people, though
   it is sometimes applied to programs and inanimate objects. In
   particular, see
              hack mode
              ,
              day mode
              ,
              night mode
              ,

              demo mode
              ,
              fireworks mode
              , and
              yoyo mode
              ; also

              talk mode

.

One also often hears the verbs 'enable' and 'disable' used in
connection with jargon modes. Thus, for example, a sillier way of
saying "I'm going to crash" is "I'm going to enable crash mode
now". One might also hear a request to "disable flame mode,
please".

In a usage much closer to techspeak, a mode is a special state that
certain user interfaces must pass into in order to perform certain
functions. For example, in order to insert characters into a
document in the Unix editor 'vi', one must type the "i" key,
which invokes the "Insert" command. The effect of this command
is to put vi into "insert mode", in which typing the "i" key
has a quite different effect (to wit, it inserts an "i" into the
document). One must then hit another special key, "ESC", in
order to leave "insert mode". Nowadays, modeful interfaces are
generally considered
              losing
               but survive in quite a few widely
used tools built in less enlightened times.

mode bit n. A
              flag
              , usually in hardware, that selects
   between two (usually quite different) modes of operation. The
   connotations are different from
              flag
               bit in that mode bits are
   mainly written during a boot or set-up phase, are seldom explicitly
   read, and seldom change over the lifetime of an ordinary program.
   The classic example was the EBCDIC-vs.-ASCII bit (#12) of the
   Program Status Word of the IBM 360. Another was the bit on a
   PDP-12 that controlled whether it ran the PDP-8 or the LINC
   instruction set.

modulo /mod'yu-loh/ prep. Except for. An
   overgeneralization of mathematical terminology; one can consider
   saying that 4 equals 22 except for the 9s (4 = 22 mod 9).
   "Well, LISP seems to work okay now, modulo that
              GC
               bug."
   "I feel fine today modulo a slight headache."

molly-guard /mol'ee-gard/ n. [University of Illinois] A
   shield to prevent tripping of some
              Big Red Switch
               by clumsy or
   ignorant hands. Originally used of the plexiglass covers
   improvised for the BRS on an IBM 4341 after a programmer's toddler
   daughter (named Molly) frobbed it twice in one day. Later
   generalized to covers over stop/reset switches on disk drives and
   networking equipment.

Mongolian Hordes technique n. [poss. from the Sixties
   counterculture expression 'Mongolian clusterfuck' for a public
   orgy] Development by

```
                      gang bang
                      .  Implies that large numbers of
   inexperienced programmers are being put on a job better performed
   by a few skilled ones.  Also called 'Chinese Army technique'; see
   also
                      Brooks's Law
                      .
```

```
monkey up vt.  To hack together hardware for a particular
   task, especially a one-shot job.  Connotes an extremely
                      crufty
                         and consciously temporary solution.  Compare
                      hack up
                      ,

                      kluge up
                      ,
                      cruft together
                      .
```

```
monkey, scratch n.  See
                      scratch monkey
                      .
```

```
monstrosity  1. n. A ridiculously
                      elephantine
                       program
   or system, esp. one that is buggy or only marginally functional.
   2. adj. The quality of being monstrous (see 'Overgeneralization' in
   the discussion of jargonification).  See also
                      baroque
                      .
```

```
monty /mon'tee/ n.  1. [US Geological Survey] A program
   with a ludicrously complex user interface written to perform
   extremely trivial tasks.  An example would be a menu-driven, button
   clicking, pulldown, pop-up windows program for listing directories.
   The original monty was an infamous weather-reporting program, Monty
   the Amazing Weather Man, written at the USGS.  Monty had a
   widget-packed X-window interface with over 200 buttons; and all
   monty actually *did* was
                      FTP
                       files off the network.
   2. [Great Britain; commonly capitalized as 'Monty' or as 'the
   Full Monty'] 16 megabytes of memory, when fitted to an IBM-PC or
   compatible.  A standard PC-compatible using the AT- or ISA-bus with
   a normal BIOS cannot access more than 16 megabytes of RAM.
   Generally used of a PC, Unix workstation, etc. to mean 'fully
   populated with' memory, disk-space or some other desirable
   resource.  This usage is possibly derived from a TV commercial for
   Del Monte fruit juice, in which one of the characters insisted on
   "the full Del Monte".  Compare American
                      moby
                      .
```

```
Moof /moof/  [Macintosh users] 1. n. The call of a
   semi-legendary creature, properly called the
```

```
              dogcow
              .  (Some
   previous version of this entry claimed, incorrectly, that Moof was
   the name of the *creature*.) 2. adj. Used to flag software
   that's a hack, something untested and on the edge.  On one Apple
   CD-ROM, certain folders such as "Tools & Apps (Moof!)" and
   "Development Platforms (Moof!)", are so marked to indicate that
   they contain software not fully tested or sanctioned by the powers
   that be.  When you open these folders you cross the boundary into
   hackerland.  3. On the Microsoft Network, the term 'moof' has
   gained popularity as a verb meaning 'to be suddenly disconnected by
   the system'.  One might say "I got moofed".
```

Moore's Law /morz law/ prov. The observation that the
   logic density of silicon integrated circuits has closely followed
   the curve (bits per square inch) = $2^{((t - 1962))}$ where
   t is time in years; that is, the amount of information storable on
   a given amount of silicon has roughly doubled every year since the
   technology was invented. This relation, first uttered in 1964 by
   semiconductor engineer Gordon Moore (who co-founded Intel four
   years later) held until the late 1970s, at which point the doubling
   period slowed to 18 months. It remained at that value through time
   of writing (late 1995). See also
              Parkinson's Law of Data
              .

moose call n. See
              whalesong
              .

moria /mor'ee-*/ n. Like
              nethack
               and
              rogue
              , one
   of the large PD Dungeons-and-Dragons-like simulation games,
   available for a wide range of machines and operating systems. The
   name is from Tolkien's Mines of Moria; compare
              elder days
              ,

              elvish
              . The game is extremely addictive and a major consumer
   of time better used for hacking.

MOTAS /moh-tahz/ n. [Usenet: Member Of The Appropriate
   Sex, after
              MOTOS
               and
              MOTSS
              ] A potential or (less often)
   actual sex partner. See also
              SO
              .

MOTOS /moh-tohs/ n. [acronym from the 1970 U.S. census
   forms via Usenet: Member Of The Opposite Sex] A potential or (less

often) actual sex partner. See
            MOTAS
            ,
            MOTSS
            ,
            SO
            .
    Less common than MOTSS or
            MOTAS
            , which have largely displaced
    it.

MOTSS /mots/ or /M-O-T-S-S/ n. [from the 1970
    U.S. census forms via Usenet] Member Of The Same Sex, esp. one
    considered as a possible sexual partner. The gay-issues newsgroup
    on Usenet is called soc.motss. See
            MOTOS
             and
            MOTAS
            ,
    which derive from it. See also
            SO
            .

mouse ahead vi. Point-and-click analog of 'type ahead'.
    To manipulate a computer's pointing device (almost always a mouse
    in this usage, but not necessarily) and its selection or command
    buttons before a computer program is ready to accept such input, in
    anticipation of the program accepting the input. Handling this
    properly is rare, but it can help make a
            WIMP environment
             much
    more usable, assuming the users are familiar with the behavior of
    the user interface.

mouse around vi. To explore public portions of a large
    system, esp. a network such as Internet via
            FTP
             or

            TELNET
            , looking for interesting stuff to
            snarf
            .

mouse belt n. See
            rat belt
            .

mouse droppings n. [MS-DOS] Pixels (usually single) that
    are not properly restored when the mouse pointer moves away from a
    particular location on the screen, producing the appearance that
    the mouse pointer has left droppings behind. The major causes for
    this problem are programs that write to the screen memory
    corresponding to the mouse pointer's current location without
    hiding the mouse pointer first, and mouse drivers that do not quite
    support the graphics mode in use.

mouse elbow n. A tennis-elbow-like fatigue syndrome
   resulting from excessive use of a
                 WIMP environment
                 .
   Similarly, 'mouse shoulder'; GLS reports that he used to get this
   a lot before he taught himself to be ambimoustrous.

mouso /mow'soh/ n. [by analogy with 'typo'] An error in
   mouse usage resulting in an inappropriate selection or graphic
   garbage on the screen. Compare
                 thinko
                 ,
                 braino
                 .

MS-DOS /M-S-dos/ n. [MicroSoft Disk Operating System] A

                 clone
                  of
                 CP/M
                  for the 8088 crufted together in 6 weeks by
   hacker Tim Paterson at Seattle Computer Products, who called the
   original QDOS (Quick and Dirty Operating System) and is said to
   have regretted it ever since. Microsoft licensed QDOS order to
   have something to demo for IBM on time, and the rest is history.
   Numerous features, including vaguely Unix-like but rather broken
   support for subdirectories, I/O redirection, and pipelines, were
   hacked into Microsoft's 2.0 and subsequent versions; as a result,
   there are two or more incompatible versions of many system calls,
   and MS-DOS programmers can never agree on basic things like what
   character to use as an option switch or whether to be
   case-sensitive. The resulting appalling mess is now the
   highest-unit-volume OS in history. Often known simply as DOS,
   which annoys people familiar with other similarly abbreviated
   operating systems (the name goes back to the mid-1960s, when it was
   attached to IBM's first disk operating system for the 360). The
   name further annoys those who know what the term
                 operating system
                    does (or ought to) connote; DOS is more properly a set of
   relatively simple interrupt services. Some people like to
   pronounce DOS like "dose", as in "I don't work on dose, man!",
   or to compare it to a dose of brain-damaging drugs (a slogan button
   in wide circulation among hackers exhorts: "MS-DOS: Just say
   No!"). See
                 mess-dos
                 ,
                 ill-behaved
                 .

mu /moo/ The correct answer to the classic trick question
   "Have you stopped beating your wife yet?". Assuming that you
   have no wife or you have never beaten your wife, the answer "yes"
   is wrong because it implies that you used to beat your wife and
   then stopped, but "no" is worse because it suggests that you have
   one and are still beating her. According to various Discordians
   and Douglas Hofstadter the correct answer is usually "mu", a

Japanese word alleged to mean "Your question cannot be answered
because it depends on incorrect assumptions". Hackers tend to be
sensitive to logical inadequacies in language, and many have
adopted this suggestion with enthusiasm. The word 'mu' is
actually from Chinese, meaning 'nothing'; it is used in
mainstream Japanese in that sense, but native speakers do not
recognize the Discordian question-denying use. It almost certainly
derives from overgeneralization of the answer in the following
well-known Rinzei Zen teaching riddle:

   A monk asked Joshu, "Does a dog have the Buddha nature?" Joshu
   retorted, "Mu!"

See also
             has the X nature
             ,
             AI Koans
             , and Douglas
Hofstadter's "G"odel, Escher, Bach: An Eternal Golden Braid"
(pointer in the
             Bibliography
              in Appendix C.

MUD /muhd/ n. [acronym, Multi-User Dungeon; alt.
   Multi-User Dimension] 1. A class of
             virtual reality
                experiments accessible via the Internet. These are real-time ↩
                  chat
forums with structure; they have multiple 'locations' like an
adventure game, and may include combat, traps, puzzles, magic, a
simple economic system, and the capability for characters to build
more structure onto the database that represents the existing
world. 2. vi. To play a MUD. The acronym MUD is often lowercased
and/or verbed; thus, one may speak of 'going mudding', etc.

Historically, MUDs (and their more recent progeny with names of MU-
form) derive from a hack by Richard Bartle and Roy Trubshaw on the
University of Essex's DEC-10 in the early 1980s; descendants of
that game still exist today and are sometimes generically called
BartleMUDs. There is a widespread myth (repeated,
unfortunately, by earlier versions of this lexicon) that the name
MUD was trademarked to the commercial MUD run by Bartle on British
Telecom (the motto: "You haven't *lived* 'til you've
died on MUD!"); however, this is false -- Richard Bartle
explicitly placed 'MUD' in the public domain in 1985. BT was upset
at this, as they had already printed trademark claims on some maps
and posters, which were released and created the myth.

Students on the European academic networks quickly improved on the
MUD concept, spawning several new MUDs (VAXMUD, AberMUD, LPMUD).
Many of these had associated bulletin-board systems for social
interaction. Because these had an image as 'research' they
often survived administrative hostility to BBSs in general. This,
together with the fact that Usenet feeds were often spotty and
difficult to get in the U.K., made the MUDs major foci of hackish
social interaction there.

AberMUD and other variants crossed the Atlantic around 1988 and
quickly gained popularity in the U.S.; they became nuclei for large
hacker communities with only loose ties to traditional hackerdom
(some observers see parallels with the growth of Usenet in the
early 1980s). The second wave of MUDs (TinyMUD and variants)
tended to emphasize social interaction, puzzles, and cooperative
world-building as opposed to combat and competition. In 1991, over
50% of MUD sites are of a third major variety, LPMUD, which
synthesizes the combat/puzzle aspects of AberMUD and older systems
with the extensibility of TinyMud. The trend toward greater
programmability and flexibility will doubtless continue.

The state of the art in MUD design is still moving very rapidly,
with new simulation designs appearing (seemingly) every month.
Around 1991 there was an unsuccessful movement to deprecate the
term
          MUD
           itself, as newer designs exhibit an exploding variety
of names corresponding to the different simulation styles being
explored. It survived. See also
          bonk/oif
          ,
          FOD
          ,

          link-dead
          ,
          mudhead
          ,
          talk mode
          .

muddie n. Syn.
          mudhead
          . More common in Great Britain,
   possibly because system administrators there like to mutter
   "bloody muddies" when annoyed at the species.

mudhead n. Commonly used to refer to a
          MUD
           player who
   eats, sleeps, and breathes MUD. Mudheads have been known to fail
   their degrees, drop out, etc., with the consolation, however, that
   they made wizard level. When encountered in person, on a MUD, or
   in a chat system, all a mudhead will talk about is three topics:
   the tactic, character, or wizard that is supposedly always unfairly
   stopping him/her from becoming a wizard or beating a favorite MUD;
   why the specific game he/she has experience with is so much better
   than any other; and the MUD he or she is writing or going to write
   because his/her design ideas are so much better than in any
   existing MUD. See also
          wannabee
          .

To the anthropologically literate, this term may recall the
Zuni/Hopi legend of the mudheads or 'koyemshi', mythical
half-formed children of an unnatural union. Figures representing

them act as clowns in Zuni sacred ceremonies. Others may recall
the 'High School Madness' sequence from the Firesign Theater album
"Don't Crush That Dwarf, Hand Me the Pliers", in which there
is a character named "Mudhead".

multician /muhl-ti'shn/ n. [coined at Honeywell,
ca. 1970] Competent user of
                Multics
                . Perhaps oddly, no one
has ever promoted the analogous 'Unician'.

Multics /muhl'tiks/ n. [from "MULTiplexed Information
and Computing Service"] An early (late 1960s) timesharing
operating system co-designed by a consortium including MIT, GE, and
Bell Laboratories. Multics was very innovative for its time ---
among other things, it introduced the idea of treating all devices
uniformly as special files. All the members but GE eventually
pulled out after determining that
                second-system effect
                 had
bloated Multics to the point of practical unusability (the
'lean' predecessor in question was
                CTSS
). Honeywell
commercialized Multics after buying out GE's computer group, but it
was never very successful (among other things, on some versions one
was commonly required to enter a password to log out). One of the
developers left in the lurch by the project's breakup was Ken
Thompson, a circumstance which led directly to the birth of

                Unix
                . For this and other reasons, aspects of the Multics
design remain a topic of occasional debate among hackers. See also

                brain-damaged
                 and
                GCOS
                .

multitask n. Often used of humans in the same meaning it
has for computers, to describe a person doing several things at
once (but see
                thrash
). The term 'multiplex', from
communications technology (meaning to handle more than one channel
at the same time), is used similarly.

mumblage /muhm'bl*j/ n. The topic of one's mumbling (see

                mumble
). "All that mumblage" is used like "all that
stuff" when it is not quite clear how the subject of discussion
works, or like "all that crap" when 'mumble' is being used as
an implicit replacement for pejoratives.

mumble interj. 1. Said when the correct response is too
complicated to enunciate, or the speaker has not thought it out.

Often prefaces a longer answer, or indicates a general reluctance
to get into a long discussion. "Don't you think that we could
improve LISP performance by using a hybrid reference-count
transaction garbage collector, if the cache is big enough and there
are some extra cache bits for the microcode to use?" "Well,
mumble ... I'll have to think about it." 2. [MIT] Expression
of not-quite-articulated agreement, often used as an informal vote
of consensus in a meeting: "So, shall we dike out the COBOL
emulation?" "Mumble!" 3. Sometimes used as an expression of
disagreement (distinguished from sense 2 by tone of voice and other
cues). "I think we should buy a
                VAX
                ." "Mumble!" Common
variant: 'mumble frotz' (see
                frotz
                ; interestingly, one does
not say 'mumble frobnitz' even though 'frotz' is short for
'frobnitz'). 4. Yet another
                metasyntactic variable
                , like

                foo
                . 5. When used as a question ("Mumble?") means "I
didn't understand you". 6. Sometimes used in 'public' contexts
on-line as a placefiller for things one is barred from giving
details about. For example, a poster with pre-released hardware in
his machine might say "Yup, my machine now has an extra 16M of
memory, thanks to the card I'm testing for Mumbleco." 7. A
conversational wild card used to designate something one doesn't
want to bother spelling out, but which can be
                glark
                ed from
context. Compare
                blurgle
                . 8. [XEROX PARC] A colloquialism
used to suggest that further discussion would be fruitless.

munch vt. [often confused with
                mung
                , q.v.] To
transform information in a serial fashion, often requiring large
amounts of computation. To trace down a data structure. Related
to
                crunch
                 and nearly synonymous with
                grovel
                , but connotes
less pain.

munching n. Exploration of security holes of someone else's
computer for thrills, notoriety, or to annoy the system manager.
Compare
                cracker
                . See also
                hacked off
                .

munching squares n.   A
                display hack
                 dating back to the
    PDP-1 (ca. 1962, reportedly discovered by Jackson Wright), which
    employs a trivial computation (repeatedly plotting the graph Y = X
    XOR T for successive values of T -- see
                HAKMEM
                 items
    146--148) to produce an impressive display of moving and growing
    squares that devour the screen. The initial value of T is treated
    as a parameter, which, when well-chosen, can produce amazing
    effects. Some of these, later (re)discovered on the LISP machine,
    have been christened 'munching triangles' (try AND for XOR and
    toggling points instead of plotting them), 'munching w's', and
    'munching mazes'. More generally, suppose a graphics program
    produces an impressive and ever-changing display of some basic
    form, foo, on a display terminal, and does it using a relatively
    simple program; then the program (or the resulting display) is
    likely to be referred to as 'munching foos'. [This is a good
    example of the use of the word
                foo
                 as a
                metasyntactic variable
                .]

munchkin /muhnch'kin/ n. [from the squeaky-voiced little
    people in L. Frank Baum's "The Wizard of Oz"] A
    teenage-or-younger micro enthusiast hacking BASIC or something else
    equally constricted. A term of mild derision -- munchkins are
    annoying but some grow up to be hackers after passing through a

                larval stage
                . The term
                urchin
                 is also used. See also

                wannabee
                ,
                bitty box
                .

mundane n. [from SF fandom] 1. A person who is not in
    science fiction fandom. 2. A person who is not in the computer
    industry. In this sense, most often an adjectival modifier as in
    "in my mundane life...." See also
                Real World
                .

mung /muhng/ vt. [in 1960 at MIT, 'Mash Until No Good';
    sometime after that the derivation from the
                recursive acronym
                 'Mung Until No Good' became standard; but see
                munge
                ] 1. To
    make changes to a file, esp. large-scale and irrevocable changes.
    See
                BLT

. 2. To destroy, usually accidentally, occasionally
maliciously. The system only mungs things maliciously; this is a
consequence of
                Finagle's Law
                . See
                scribble
                ,
                mangle
                ,

                trash
                ,
                nuke
                . Reports from
                Usenet
                 suggest that the
pronunciation /muhnj/ is now usual in speech, but the spelling
'mung' is still common in program comments (compare the
widespread confusion over the proper spelling of
                kluge
).
3. The kind of beans of which the sprouts are used in Chinese food.
(That's their real name! Mung beans! Really!)

Like many early hacker terms, this one seems to have originated at

                TMRC
                ; it was already in use there in 1958. Peter Samson
(compiler of the original TMRC lexicon) thinks it may originally
have been onomatopoeic for the sound of a relay spring (contact)
being twanged. However, it is known that during the World Wars,
'mung' was U.S. army slang for the ersatz creamed chipped beef
better known as 'SOS', and it seems quite likely that the word in
fact goes back to Scots-dialect
                munge
                .

munge /muhnj/ vt. 1. [derogatory] To imperfectly
transform information. 2. A comprehensive rewrite of a routine,
data structure or the whole program. 3. To modify data in some way
the speaker doesn't need to go into right now or cannot describe
succinctly (compare
                mumble
).

This term is often confused with
                mung
                , which probably was
derived from it. However, it also appears the word 'munge' was in
common use in Scotland in the 1940s, and in Yorkshire in the 1950s,
as a verb, meaning to munch up into a masticated mess, and
as a noun, meaning the result of munging something up (the
parallel with the
                kluge
                /
                kludge
                 pair is amusing).

Murphy's Law prov. The correct, *original* Murphy's
   Law reads: "If there are two or more ways to do something, and one
   of those ways can result in a catastrophe, then someone will do
   it." This is a principle of defensive design, cited here because
   it is usually given in mutant forms less descriptive of the
   challenges of design for
                    luser
                    s. For example, you don't make a
   two-pin plug symmetrical and then label it 'THIS WAY UP'; if it
   matters which way it is plugged in, then you make the design
   asymmetrical (see also the anecdote under
                    magic smoke
).

   Edward A. Murphy, Jr. was one of the engineers on the rocket-sled
   experiments that were done by the U.S. Air Force in 1949 to test
   human acceleration tolerances (USAF project MX981). One experiment
   involved a set of 16 accelerometers mounted to different parts of
   the subject's body. There were two ways each sensor could be glued
   to its mount, and somebody methodically installed all 16 the wrong
   way around. Murphy then made the original form of his
   pronouncement, which the test subject (Major John Paul Stapp)
   quoted at a news conference a few days later.

   Within months 'Murphy's Law' had spread to various technical
   cultures connected to aerospace engineering. Before too many years
   had gone by variants had passed into the popular imagination,
   changing as they went. Most of these are variants on "Anything
   that can go wrong, will"; this is sometimes referred to as

                    Finagle's Law
                    . The memetic drift apparent in these mutants
   clearly demonstrates Murphy's Law acting on itself!

music n. A common extracurricular interest of hackers
   (compare
                    science-fiction fandom
                    ,
                    oriental food
                    ; see also

                    filk
). Hackish folklore has long claimed that musical and
   programming abilities are closely related, and there has been at
   least one large-scale statistical study that supports this.
   Hackers, as a rule, like music and often develop musical
   appreciation in unusual and interesting directions. Folk music is
   very big in hacker circles; so is electronic music, and the sort of
   elaborate instrumental jazz/rock that used to be called
   'progressive' and isn't recorded much any more. The hacker's
   musical range tends to be wide; many can listen with equal
   appreciation to (say) Talking Heads, Yes, Gentle Giant, Pat
   Metheny, Scott Joplin, Tangerine Dream, Dream Theater, King Sunny
   Ade, The Pretenders, Screaming Trees, or the Brandenburg Concerti.
   It is also apparently true that hackerdom includes a much higher
   concentration of talented amateur musicians than one would expect

from a similar-sized control group of
                mundane
                 types.

mutter vt. To quietly enter a command not meant for the
   ears, eyes, or fingers of ordinary mortals. Often used in 'mutter
   an
                incantation
                '. See also
                wizard
                .

1.19   N

                N /N/ quant. 1. A large and indeterminate number of
   objects: "There were N bugs in that crock!" Also used in
   its original sense of a variable name: "This crock has N
   bugs, as N goes to infinity." (The true number of bugs is
   always at least N + 1; see
                Lubarsky's Law of Cybernetic Entomology
                .)
   2. A variable whose value is inherited from the
   current context. For example, when a meal is being ordered at a
   restaurant, N may be understood to mean however many people
   there are at the table. From the remark "We'd like to order
   N wonton soups and a family dinner for N - 1" you
   can deduce that one person at the table wants to eat only soup,
   even though you don't know how many people there are (see

                great-wall
). 3. 'Nth': adj. The ordinal counterpart
   of N, senses 1 and 2. "Now for the Nth and last
   time..." In the specific context "Nth-year grad
   student", N is generally assumed to be at least 4, and is
   usually 5 or more (see
                tenured graduate student
). See also

                random numbers
                ,
                two-to-the-N
                .

nadger /nad'jr/ v. [UK] Of software or hardware (not
   people), to twiddle some object in a hidden manner, generally so
   that it conforms better to some format. For instance, string
   printing routines on 8-bit processors often take the string text
   from the instruction stream, thus a print call looks like 'jsr
   print:"Hello world"'. The print routine has to 'nadger' the
   saved instruction pointer so that the processor doesn't try to
   execute the text as instructions when the subroutine returns.

   Apparently this word originated on a now-legendary 1950s radio
   comedy program called "The Goon Show". The Goon Show usage

       of "nadger" was definitely in the sense of "jinxed"
    "clobbered" "fouled up". The American mutation
                adger
                    seems to have preserved more of the original flavor.

nagware /nag'weir/ n. [Usenet] The variety of
                shareware
                    that displays a large screen at the beginning or end reminding ←↩
                      you
    to register, typically requiring some sort of keystroke to continue
    so that you can't use the software in batch mode. Compare

                crippleware
                .

nailed to the wall adj. [like a trophy] Said of a bug
    finally eliminated after protracted, and even heroic, effort.

nailing jelly vi. See
                like nailing jelly to a tree
                .

naive adj. Untutored in the perversities of some particular
    program or system; one who still tries to do things in an intuitive
    way, rather than the right way (in really good designs these
    coincide, but most designs aren't 'really good' in the
    appropriate sense). This trait is completely unrelated to general
    maturity or competence, or even competence at any other specific
    program. It is a sad commentary on the primitive state of
    computing that the natural opposite of this term is often claimed
    to be 'experienced user' but is really more like 'cynical
    user'.

naive user n. A
                luser
                . Tends to imply someone who is
    ignorant mainly owing to inexperience. When this is applied to
    someone who *has* experience, there is a definite implication
    of stupidity.

NAK /nak/ interj. [from the ASCII mnemonic for 0010101]
    1. On-line joke answer to
                ACK
                ?: "I'm not here." 2. On-line
    answer to a request for chat: "I'm not available." 3. Used to
    politely interrupt someone to tell them you don't understand their
    point or that they have suddenly stopped making sense. See

                ACK
                , sense 3. "And then, after we recode the project in
    COBOL...." "Nak, Nak, Nak! I thought I heard you say
    COBOL!"

nano /nan'oh/ n. [CMU: from 'nanosecond'] A brief
    period of time. "Be with you in a nano" means you really will be
    free shortly, i.e., implies what mainstream people mean by "in a
    jiffy" (whereas the hackish use of 'jiffy' is quite different

```
   -- see
               jiffy
               ).

nano- pref.  [SI: the next quantifier below
               micro-
               ;
   meaning * 10^(-9)] Smaller than
               micro-
               , and used in
   the same rather loose and connotative way.  Thus, one has

               nanotechnology
                (coined by hacker K. Eric Drexler) by analogy
   with 'microtechnology'; and a few machine architectures have a
   'nanocode' level below 'microcode'.  Tom Duff at Bell Labs has
   also pointed out that "Pi seconds is a nanocentury".
   See also
               quantifiers
               ,
               pico-
               ,
               nanoacre
               ,
               nanobot
               ,

               nanocomputer
               ,
               nanofortnight
               .

nanoacre /nan'oh-ay`kr/ n.  A unit (about 2 mm square) of
   real estate on a VLSI chip.  The term gets its giggle value from
   the fact that VLSI nanoacres have costs in the same range as real
   acres once one figures in design and fabrication-setup costs.

nanobot /nan'oh-bot/ n.  A robot of microscopic
   proportions, presumably built by means of
               nanotechnology
                .  As
   yet, only used informally (and speculatively!).  Also called a
   'nanoagent'.

nanocomputer /nan'oh-k*m-pyoo'tr/ n.  A computer with
   molecular-sized switching elements.  Designs for mechanical
   nanocomputers which use single-molecule sliding rods for their
   logic have been proposed.  The controller for a
               nanobot
                would
   be a nanocomputer.

nanofortnight n.  [Adelaide University] 1 fortnight *
   10^-9, or about 1.2 msec.  This unit was used largely by students
   doing undergraduate practicals.  See
               microfortnight
               ,
```

```
                    attoparsec
                    , and
                    micro-
                    .
```

nanotechnology /nan'-oh-tek-no`l*-jee/ n. A hypothetical
    fabrication technology in which objects are designed and built with
    the individual specification and placement of each separate atom.
    The first unequivocal nanofabrication experiments took place in
    1990, for example with the deposition of individual xenon atoms on
    a nickel substrate to spell the logo of a certain very large
    computer company. Nanotechnology has been a hot topic in the
    hacker subculture ever since the term was coined by K. Eric Drexler
    in his book "Engines of Creation", where he predicted that
    nanotechnology could give rise to replicating assemblers,
    permitting an exponential growth of productivity and personal
    wealth. See also
                    blue goo
                    ,
                    gray goo
                    ,
                    nanobot
                    .

nasal demons n. Recognized shorthand on the Usenet group
    comp.std.c for any unexpected behavior of a C compiler on
    encountering an undefined construct. During a discussion on that
    group in early 1992, a regular remarked "When the compiler
    encounters [a given undefined construct] it is legal for it to make
    demons fly out of your nose" (the implication is that the compiler
    may choose any arbitrarily bizarre way to interpret the code
    without violating the ANSI C standard). Someone else followed up
    with a reference to "nasal demons", which quickly became
    established.

nastygram /nas'tee-gram/ n. 1. A protocol packet or item
    of email (the latter is also called a
                    letterbomb
) that takes
    advantage of misfeatures or security holes on the target system to
    do untoward things. 2. Disapproving mail, esp. from a

                    net.god
                    , pursuant to a violation of
                    netiquette
                     or a
    complaint about failure to correct some mail- or news-transmission
    problem. Compare
                    shitogram
                    ,
                    mailbomb
                    . 3. A status
    report from an unhappy, and probably picky, customer. "What'd
    Corporate say in today's nastygram?" 4. [deprecated] An error
    reply by mail from a
                    daemon

```
                    ; in particular, a
                    bounce message
                    .

Nathan Hale n.  An asterisk (see also
                    splat
                    ,

                    ASCII
                    ).  Oh, you want an etymology?  Notionally, from "I
    regret that I have only one asterisk for my country!", a misquote
    of the famous remark uttered by Nathan Hale just before he was
    hanged.  Hale was a (failed) spy for the rebels in the American War
    of Independence.

nature n.  See
                    has the X nature
                    .

neat hack n.  1. A clever technique.  2. A brilliant
    practical joke, where neatness is correlated with cleverness,
    harmlessness, and surprise value.  Example: the Caltech Rose Bowl
    card display switch (see "
                    The Meaning of 'Hack'
                    ",
    Appendix A).  See also
                    hack
                    .

neats vs. scruffies n.  The label used to refer to one of
    the continuing
                    holy wars
                     in AI research.  This conflict
    tangles together two separate issues.  One is the relationship
    between human reasoning and AI; 'neats' tend to try to build
    systems that 'reason' in some way identifiably similar to the
    way humans report themselves as doing, while 'scruffies' profess
    not to care whether an algorithm resembles human reasoning in the
    least as long as it works.  More importantly, neats tend to believe
    that logic is king, while scruffies favor looser, more ad-hoc
    methods driven by empirical knowledge.  To a neat, scruffy methods
    appear promiscuous, successful only by accident, and not productive
    of insights about how intelligence actually works; to a scruffy,
    neat methods appear to be hung up on formalism and irrelevant to
    the hard-to-capture 'common sense' of living intelligences.

neep-neep /neep neep/ n.  [onomatopoeic, from New York SF
    fandom] One who is fascinated by computers.  Less specific than


                    hacker
                    , as it need not imply more skill than is required to
    boot games on a PC.  The derived noun 'neeping' applies
    specifically to the long conversations about computers that tend to
    develop in the corners at most SF-convention parties (the term
    'neepery' is also in wide use).  Fandom has a related proverb to
    the effect that "Hacking is a conversational black hole!".
```

neophilia /nee'oh-fil'-ee-*/ n. The trait of being
   excited and pleased by novelty. Common among most hackers, SF
   fans, and members of several other connected leading-edge
   subcultures, including the pro-technology 'Whole Earth' wing of
   the ecology movement, space activists, many members of Mensa, and
   the Discordian/neo-pagan underground. All these groups overlap
   heavily and (where evidence is available) seem to share
   characteristic hacker tropisms for science fiction,
                music
                , and

                oriental food
                . The opposite tendency is 'neophobia'.

nerd n. 1. [mainstream slang] Pejorative applied to anyone
   with an above-average IQ and few gifts at small talk and ordinary
   social rituals. 2. [jargon] Term of praise applied (in conscious
   ironic reference to sense 1) to someone who knows what's really
   important and interesting and doesn't care to be distracted by
   trivial chatter and silly status games. Compare the two senses of

                computer geek
                .

   The word itself appears to derive from the line "And then, just to
   show them, I'll sail to Ka-Troo And Bring Back an It-Kutch, a Preep
   and a Proo, a Nerkle, a Nerd, and a Seersucker, too!" in the
   Dr. Seuss book "If I Ran the Zoo" (1950). (The spellings
   'nurd' and 'gnurd' also used to be current at MIT.) How it
   developed its mainstream meaning is unclear, but sense 1 seems to
   have entered mass culture in the early 1970s (there are reports
   that in the mid-1960s it meant roughly "annoying misfit"
   without the connotation of intelligence). Hackers developed sense
   2 in self-defense perhaps ten years later, and some actually wear
   "Nerd Pride" buttons, only half as a joke.

net.- /net dot/ pref. [Usenet] Prefix used to describe
   people and events related to Usenet. From the time before the

                Great Renaming
                , when most non-local newsgroups had names
   beginning 'net.'. Includes
                net.god
                s, 'net.goddesses'
   (various charismatic net.women with circles of on-line admirers),
   'net.lurkers' (see
                lurker
                ), 'net.person', 'net.parties'
   (a synonym for
                boink
                , sense 2), and many similar constructs.
   See also
                net.police
                .

net.god /net god/ n. Accolade referring to anyone who
   satisfies some combination of the following conditions: has been

       visible on Usenet for more than 5 years, ran one of the original
    backbone sites, moderated an important newsgroup, wrote news
    software, or knows Gene, Mark, Rick, Mel, Henry, Chuq, and Greg
    personally.   See
                 demigod
                 . Net.goddesses such as Rissa or the
    Slime Sisters have (so far) been distinguished more by personality
    than by authority.

net.personality /net per`sn-al'-*-tee/ n.   Someone who has
    made a name for him or herself on
                 Usenet
                 , through either
    longevity or attention-getting posts, but doesn't meet the other
    requirements of
                 net.god
                 hood.

net.police /net-p*-lees'/ n.   (var. `net.cops') Those
    Usenet readers who feel it is their responsibility to pounce on and

                 flame
                  any posting which they regard as offensive or in
    violation of their understanding of
                 netiquette
                 . Generally
    used sarcastically or pejoratively. Also spelled `net police'.
    See also
                 net.-
                 ,
                 code police
                 .

NetBOLLIX n.   [from bollix: to bungle]
                 IBM
                 's NetBIOS, an
    extremely
                 brain-damaged
                  network protocol that, like
                 Blue Glue
                 ,
    is used at commercial shops that don't know any better.

netburp n.   [IRC] When
                 netlag
                  gets really bad, and
    delays between servers exceed a certain threshhold, the
                 IRC
                    network effectively becomes partitioned for a period of time, ←↩
                        and
    large numbers of people seem to be signing off at the same time and
    then signing back on again when things get better. An instance of
    this is called a `netburp' (or, sometimes,
                 netsplit
).

netdead n.   [IRC] The state of someone who signs off

                IRC
                , perhaps during a
                netburp
                , and doesn't sign back on
    until later. In the interim, he is "dead to the net".

nethack /net'hak/ n.   [Unix] A dungeon game similar to

                rogue
                 but more elaborate, distributed in C source over

                Usenet
                 and very popular at Unix sites and on PC-class machines
    (nethack is probably the most widely distributed of the freeware
    dungeon games). The earliest versions, written by Jay Fenlason and
    later considerably enhanced by Andries Brouwer, were simply called
    'hack'. The name changed when maintenance was taken over by a
    group of hackers originally organized by Mike Stephenson; the
    current contact address (as of early 1996) is
    nethack-bugs@linc.cis.upenn.edu.

netiquette /net'ee-ket/ or /net'i-ket/ n.   [portmanteau
    from "network etiquette"] The conventions of politeness
    recognized on
                Usenet
                , such as avoidance of cross-posting to
    inappropriate groups and refraining from commercial pluggery
    outside the biz groups.

netlag n.   [IRC, MUD] A condition that occurs when the
    delays in the
                IRC
                 network or on a
                MUD
                 become severe
    enough that servers briefly lose and then reestablish contact,
    causing messages to be delivered in bursts, often with delays of up
    to a minute. (Note that this term has nothing to do with
    mainstream "jet lag", a condition which hackers tend not to be
    much bothered by.)

netnews /net'n[y]ooz/ n.   1. The software that makes

                Usenet
                 run. 2. The content of Usenet. "I read netnews
    right after my mail most mornings."

netrock /net'rok/ n.   [IBM] A
                flame
                ; used esp. on
    VNET, IBM's internal corporate network.

netsplit n.   Syn.
                netburp
                .

netter n.   1. Loosely, anyone with a
                network address
                .
   2. More specifically, a
                Usenet
                 regular. Most often found in
   the plural. "If you post *that* in a technical group, you're
   going to be flamed by angry netters for the rest of time!"

network address n. (also 'net address') As used by
   hackers, means an address on 'the' network (see
                network, the
                ;
   this is almost always a
                bang path
                 or
                Internet address
).
   Such an address is essential if one wants to be to be
   taken seriously by hackers; in particular, persons or organizations
   that claim to understand, work with, sell to, or recruit from among
   hackers but *don't* display net addresses are quietly presumed
   to be clueless poseurs and mentally flushed (see
                flush
                , sense
   4). Hackers often put their net addresses on their business cards
   and wear them prominently in contexts where they expect to meet
   other hackers face-to-face (see also
                science-fiction fandom
).
   This is mostly functional, but is also a signal that one identifies
   with hackerdom (like lodge pins among Masons or tie-dyed T-shirts
   among Grateful Dead fans). Net addresses are often used in email
   text as a more concise substitute for personal names; indeed,
   hackers may come to know each other quite well by network names
   without ever learning each others' 'legal' monikers. See also

                sitename
                ,
                domainist
                .

network meltdown n. A state of complete network overload;
   the network equivalent of
                thrash
                ing. This may be induced by a

                Chernobyl packet
                . See also
                broadcast storm
                ,
                kamikaze packet
                .

   Network meltdown is often a result of network designs that are
   optimized for a steady state of moderate load and don't cope well
   with the very jagged, bursty usage patterns of the real world. One

amusing instance of this is triggered by the the popular and very
bloody shoot-'em-up game Doom on the PC. When used in
multiplayer mode over a network, the game uses broadcast packets to
inform other machines when bullets are fired. This causes problems
with weapons like the chain gun which fire rapidly -- it can blast
the network into a meltdown state just as easily as it shreds
opposing monsters.

network, the n. 1. The union of all the major
   noncommercial, academic, and hacker-oriented networks, such as
   Internet, the old ARPANET, NSFnet,
                 BITNET
                 , and the virtual
   UUCP and
                 Usenet
                  'networks', plus the corporate in-house
   networks and commercial time-sharing services (such as CompuServe)
   that gateway to them. A site is generally considered 'on the
   network' if it can be reached through some combination of
   Internet-style (@-sign) and UUCP (bang-path) addresses. See

                 bang path
                 ,
                 Internet address
                 ,
                 network address
                 . 2. A
   fictional conspiracy of libertarian hacker-subversives and
   anti-authoritarian monkeywrenchers described in Robert Anton
   Wilson's novel "Schr"odinger's Cat", to which many hackers
   have subsequently decided they belong (this is an example of

                 ha ha only serious
).

   In sense 1, 'network' is often abbreviated to 'net'. "Are
   you on the net?" is a frequent question when hackers first meet
   face to face, and "See you on the net!" is a frequent goodbye.

New Jersey adj. [primarily Stanford/Silicon Valley]
   Brain-damaged or of poor design. This refers to the allegedly
   wretched quality of such software as C, C++, and Unix (which
   originated at Bell Labs in Murray Hill, New Jersey). "This
   compiler bites the bag, but what can you expect from a compiler
   designed in New Jersey?" Compare
                 Berkeley Quality Software
                 .
   See also
                 Unix conspiracy
                 .

New Testament n. [C programmers] The second edition of
   K&R's "The C Programming Language" (Prentice-Hall, 1988; ISBN
   0-13-110362-8), describing ANSI Standard C. See
                 K&R
                 .

newbie /n[y]oo'bee/ n. [orig. from British public-school
   and military slang variant of `new boy'] A Usenet neophyte. This
   term surfaced in the
                newsgroup
                 talk.bizarre but is now in
   wide use. Criteria for being considered a newbie vary wildly; a
   person can be called a newbie in one newsgroup while remaining a
   respected regular in another. The label `newbie' is sometimes
   applied as a serious insult to a person who has been around Usenet
   for a long time but who carefully hides all evidence of having a
   clue. See
                B1FF
                .

newgroup wars /n[y]oo'groop worz/ n. [Usenet] The salvos of
   dueling `newgroup' and `rmgroup' messages sometimes
   exchanged by persons on opposite sides of a dispute over whether a

                newsgroup
                 should be created net-wide, or (even more
   frequently) whether an obsolete one should be removed. These
   usually settle out within a week or two as it becomes clear whether
   the group has a natural constituency (usually, it doesn't). At
   times, especially in the completely anarchic alt hierarchy, the
   names of newsgroups themselves become a form of comment or humor;
   e.g., the spinoff of alt.swedish.chef.bork.bork.bork from
   alt.tv.muppets in early 1990, or any number of specialized
   abuse groups named after particularly notorious
                flamer
                s, e.g.,
   alt.weemba.

newline /n[y]oo'li:n/ n. 1. [techspeak, primarily Unix]
   The ASCII LF character (0001010), used under
                Unix
                 as a text
   line terminator. A Bell-Labs-ism rather than a Berkeleyism;
   interestingly (and unusually for Unix jargon), it is said to have
   originally been an IBM usage. (Though the term `newline'
   appears in ASCII standards, it never caught on in the general
   computing world before Unix). 2. More generally, any magic
   character, character sequence, or operation (like Pascal's writeln
   procedure) required to terminate a text record or separate lines.
   See
                crlf
                ,
                terpri
                .

NeWS /nee'wis/, /n[y]oo'is/ or /n[y]ooz/ n. [acronym;
   the `Network Window System'] The road not taken in window systems,
   an elegant
                PostScript
                -based environment that would almost
   certainly have won the standards war with
                X
                 if it hadn't been

```
                    proprietary
                     to Sun Microsystems.  There is a lesson here that
       too many software vendors haven't yet heeded.  Many hackers insist
       on the two-syllable pronunciations above as a way of distinguishing
       NeWS from
                    news
                     (the
                    netnews
                     software).
```

news n. See
                    netnews
                    .

newsfroup // n. [Usenet] Silly synonym for
                    newsgroup
                    ,
       originally a typo but now in regular use on Usenet's talk.bizarre
       and other lunatic-fringe groups. Compare
                    hing
                    ,
                    grilf
                    ,
       and
                    filk
                    .

newsgroup n. [Usenet] One of
                    Usenet
                    's huge collection of
       topic groups or
                    fora
                    . Usenet groups can be 'unmoderated'
       (anyone can post) or 'moderated' (submissions are automatically
       directed to a moderator, who edits or filters and then posts the
       results). Some newsgroups have parallel
                    mailing list
                    s for
       Internet people with no netnews access, with postings to the group
       automatically propagated to the list and vice versa. Some
       moderated groups (especially those which are actually gatewayed
       Internet mailing lists) are distributed as 'digests', with groups
       of postings periodically collected into a single large posting with
       an index.

       Among the best-known are comp.lang.c (the C-language forum),
       comp.arch (on computer architectures), comp.unix.wizards
       (for Unix wizards), rec.arts.sf.written and siblings (for
       science-fiction fans), and talk.politics.misc (miscellaneous
       political discussions and
                    flamage
).

nick n. [IRC] Short for nickname. On
                    IRC
                    , every user must

   pick a nick, which is sometimes the same as the user's real name or
   login name, but is often more fanciful. Compare
                handle
                .

nickle /ni'kl/ n. [from 'nickel', common name for the
   U.S. 5-cent coin] A
                nybble
                 + 1; 5 bits. Reported among
   developers for Mattel's GI 1600 (the Intellivision games
   processor), a chip with 16-bit-wide RAM but 10-bit-wide ROM. See
   also
                deckle
                , and
                nybble
                 for names of other bit units.

night mode n. See
                phase
                 (of people).

Nightmare File System n. Pejorative hackerism for Sun's
   Network File System (NFS). In any nontrivial network of Suns
   where there is a lot of NFS cross-mounting, when one Sun goes down,
   the others often freeze up. Some machine tries to access the down
   one, and (getting no response) repeats indefinitely. This causes
   it to appear dead to some messages (what is actually happening is
   that it is locked up in what should have been a brief excursion to
   a higher
                spl
                 level). Then another machine tries to reach
   either the down machine or the pseudo-down machine, and itself
   becomes pseudo-down. The first machine to discover the down one is
   now trying both to access the down one and to respond to the
   pseudo-down one, so it is even harder to reach. This situation
   snowballs very quickly, and soon the entire network of machines is
   frozen -- worst of all, the user can't even abort the file access
   that started the problem! Many of NFS's problems are excused by
   partisans as being an inevitable result of its statelessness, which
   is held to be a great feature (critics, of course, call it a great

                misfeature
). (ITS partisans are apt to cite this as proof of
   Unix's alleged bogosity; ITS had a working NFS-like shared file
   system with none of these problems in the early 1970s.) See also

                broadcast storm
                .

NIL /nil/ No. Used in reply to a question, particularly
   one asked using the '-P' convention. Most hackers assume this
   derives simply from LISP terminology for 'false' (see also

                T
                ), but NIL as a negative reply was well-established among
   radio hams decades before the advent of LISP. The historical
   connection between early hackerdom and the ham radio world was

strong enough that this may have been an influence.

Ninety-Ninety Rule n.   "The first 90% of the code accounts
   for the first 90% of the development time. The remaining 10% of
   the code accounts for the other 90% of the development time."
   Attributed to Tom Cargill of Bell Labs, and popularized by Jon
   Bentley's September 1985 "Bumper-Sticker Computer Science"
   column in "Communications of the ACM". It was there called
   the "Rule of Credibility", a name which seems not to have stuck.

NMI /N-M-I/ n. Non-Maskable Interrupt. An IRQ 7 on the
   PDP-11 or 680[01234]0; the NMI line on an 80[1234]86. In contrast
   with a
               priority interrupt
                (which might be ignored, although
   that is unlikely), an NMI is *never* ignored. Except, that
   is, on
               clone
                boxes, where NMI is often ignored on the
   motherboard because flaky hardware can generate many spurious
   ones.

no-op /noh'op/ n,v. alt. NOP /nop/ [no operation] 1.
   A machine instruction that does nothing (sometimes used in
   assembler-level programming as filler for data or patch areas, or
   to overwrite code to be removed in binaries). See also
               JFCL
               .
   2. A person who contributes nothing to a project, or has nothing
   going on upstairs, or both. As in "He's a no-op." 3. Any
   operation or sequence of operations with no effect, such as
   circling the block without finding a parking space, or putting
   money into a vending machine and having it fall immediately into
   the coin-return box, or asking someone for help and being told to
   go away. "Oh, well, that was a no-op." Hot-and-sour soup (see

               great-wall
) that is insufficiently either is 'no-op soup';
   so is wonton soup if everybody else is having hot-and-sour.

noddy /nod'ee/ adj. [UK: from the children's books]
   1. Small and un-useful, but demonstrating a point. Noddy programs
   are often written by people learning a new language or system. The
   archetypal noddy program is
               hello, world
               . Noddy code may be
   used to demonstrate a feature or bug of a compiler. May be used of
   real hardware or software to imply that it isn't worth using.
   "This editor's a bit noddy." 2. A program that is more or less
   instant to produce. In this use, the term does not necessarily
   connote uselessness, but describes a
               hack
               sufficiently trivial
   that it can be written and debugged while carrying on (and during
   the space of) a normal conversation. "I'll just throw together a
   noddy
               awk

                script to dump all the first fields." In North
    America this might be called a
                mickey mouse program
                . See

                toy program
                .

NOMEX underwear /noh'meks uhn'-der-weir/ n. [Usenet] Syn.

                asbestos longjohns
                , used mostly in auto-related mailing lists
    and newsgroups. NOMEX underwear is an actual product available on
    the racing equipment market, used as a fire resistance measure and
    required in some racing series.

Nominal Semidestructor n. Soundalike slang for 'National
    Semiconductor', found among other places in the Networking/2
    networking sources. During the late 1970s to mid-1980s this
    company marketed a series of microprocessors including the NS16000
    and NS32000 and several variants. At one point early in the great
    microprocessor race, the specs on these chips made them look like
    serious competition for the rising Intel 80x86 and Motorola 680x0
    series. Unfortunately, the actual parts were notoriously flaky and
    never implemented the full instruction set promised in their
    literature, apparently because the company couldn't get any of the
    mask steppings to work as designed. They eventually sank without
    trace, joining the Zilog Z8000 and a few even more obscure
    also-rans in the graveyard of forgotten microprocessors. Compare

                HP-SUX
                ,
                AIDX
                ,
                buglix
                ,
                Macintrash
                ,
                Telerat
                ,

                Open DeathTrap
                ,
                ScumOS
                ,
                sun-stools
                .

non-optimal solution n. (also 'sub-optimal solution') An
    astoundingly stupid way to do something. This term is generally
    used in deadpan sarcasm, as its impact is greatest when the person
    speaking looks completely serious. Compare
                stunning
                . See
    also
                Bad Thing
                .

nonlinear adj. [scientific computation] 1. Behaving in an
   erratic and unpredictable fashion; unstable. When used to describe
   the behavior of a machine or program, it suggests that said machine
   or program is being forced to run far outside of design
   specifications. This behavior may be induced by unreasonable
   inputs, or may be triggered when a more mundane bug sends the
   computation far off from its expected course. 2. When describing
   the behavior of a person, suggests a tantrum or a
                flame
                .
   "When you talk to Bob, don't mention the drug problem or he'll go
   nonlinear for hours." In this context, 'go nonlinear' connotes
   'blow up out of proportion' (proportion connotes linearity).

nontrivial adj. Requiring real thought or significant
   computing power. Often used as an understated way of saying that a
   problem is quite difficult or impractical, or even entirely
   unsolvable ("Proving P=NP is nontrivial"). The preferred
   emphatic form is 'decidedly nontrivial'. See
                trivial
                ,
                uninteresting
                ,
                interesting
                .

not ready for prime time adj. Usable, but only just so; not
   very robust; for internal use only. Said of a program or device.
   Often connotes that the thing will be made more solid

                Real Soon Now
                . This term comes from the ensemble name of the
   original cast of "Saturday Night Live", the "Not Ready for Prime
   Time Players". It has extra flavor for hackers because of the
   special (though now semi-obsolescent) meaning of
                prime time
                .
   Compare
                beta
                .

notwork /not'werk/ n. A network, when it is acting

                flaky
                 or is
                down
                . Compare
                nyetwork
                . Said at IBM to
   have originally referred to a particular period of flakiness on
   IBM's VNET corporate network ca. 1988; but there are independent
   reports of the term from elsewhere.

NP- /N-P/ pref. Extremely. Used to modify adjectives
   describing a level or quality of difficulty; the connotation is

often 'more so than it should be' (NP-complete problems all seem
to be very hard, but so far no one has found a good a priori
reason that they should be.) "Coding a BitBlt implementation to
perform correctly in every case is NP-annoying." This is
generalized from the computer-science terms 'NP-hard' and
'NP-complete'. NP is the set of Nondeterministic-Polynomial
algorithms, those that can be completed by a nondeterministic
Turing machine in an amount of time that is a polynomial function
of the size of the input; a solution for one NP-complete problem
would solve all the others. Note, however, that the NP- prefix is,
from a complexity theorist's point of view, the wrong part of
'NP-complete' to connote extreme difficulty; it is the
completeness, not the NP-ness, that puts any problem it describes
in the 'hard' category.

nroff /N'rof/ n. [Unix, from "new roff" (see

                troff
)] A companion program to the Unix typesetter
                troff
                ,
accepting identical input but preparing output for terminals and
line printers.

NSA line eater n. The National Security Agency trawling
program sometimes assumed to be reading the net for the
U.S. Government's spooks. Most hackers describe it as a mythical
beast, but some believe it actually exists, more aren't sure, and
many believe in acting as though it exists just in case. Some
netters put loaded phrases like 'KGB', 'Uzi', 'nuclear
materials', 'Palestine', 'cocaine', and 'assassination' in
their
                sig block
                s in a (probably futile) attempt to confuse and
overload the creature. The
                GNU
                 version of
                EMACS
                 actually
has a command that randomly inserts a bunch of insidious
anarcho-verbiage into your edited text.

There is a mainstream variant of this myth involving a 'Trunk Line
Monitor', which supposedly used speech recognition to extract words
from telephone trunks. This one was making the rounds in the
late 1970s, spread by people who had no idea of then-current
technology or the storage, signal-processing, or speech recognition
needs of such a project. On the basis of mass-storage costs alone
it would have been cheaper to hire 50 high-school students and just
let them listen in. Speech-recognition technology can't do this
job even now (1996), and almost certainly won't in this millennium,
either. The peak of silliness came with a letter to an alternative
paper in New Haven, Connecticut, laying out the factoids of this
Big Brotherly affair. The letter writer then revealed his actual
agenda by offering -- at an amazing low price, just this once, we
take VISA and MasterCard -- a scrambler guaranteed to daunt the
Trunk Trawler and presumably allowing the would-be Baader-Meinhof

gangs of the world to get on with their business.

nude adj. Said of machines delivered without an operating
   system (compare
                bare metal
). "We ordered 50 systems, but
   they all arrived nude, so we had to spend a an extra weekend with
   the installation tapes." This usage is a recent innovation
   reflecting the fact that most PC clones are now delivered with DOS
   or Microsoft Windows pre-installed at the factory. Other kinds of
   hardware are still normally delivered without OS, so this term is
   particular to PC support groups.

nuke /n[y]ook/ vt. 1. To intentionally delete the entire
   contents of a given directory or storage volume. "On Unix,
   'rm -r /usr' will nuke everything in the usr filesystem."
   Never used for accidental deletion. Oppose
                blow away
                .
   2. Syn. for
                dike
                , applied to smaller things such as files,
   features, or code sections. Often used to express a final verdict.
   "What do you want me to do with that 80-meg
                wallpaper
                 file?"
   "Nuke it." 3. Used of processes as well as files; nuke is a
   frequent verbal alias for 'kill -9' on Unix. 4. On IBM PCs,
   a bug that results in
                fandango on core
                 can trash the operating
   system, including the FAT (the in-core copy of the disk block
   chaining information). This can utterly scramble attached disks,
   which are then said to have been 'nuked'. This term is also used
   of analogous lossages on Macintoshes and other micros without
   memory protection.

number-crunching n. Computations of a numerical nature,
   esp. those that make extensive use of floating-point numbers.
   The only thing
                Fortrash
                 is good for. This term is in
   widespread informal use outside hackerdom and even in mainstream
   slang, but has additional hackish connotations: namely, that the
   computations are mindless and involve massive use of
                brute force
                .
   This is not always
                evil
                , esp. if it involves ray
   tracing or fractals or some other use that makes
                pretty pictures
                ,
   esp. if such pictures can be used as
                wallpaper
                .
   See also

```
            crunch
            .
```

numbers n.   [scientific computation] Output of a computation
   that may not be significant results but at least indicate that the
   program is running. May be used to placate management, grant
   sponsors, etc. 'Making numbers' means running a program because
   output -- any output, not necessarily meaningful output -- is
   needed as a demonstration of progress. See
```
            pretty pictures
            ,

            math-out
            ,
            social science number
            .
```

NUXI problem /nuk'see pro'bl*m/ n. Refers to the problem
   of transferring data between machines with differing byte-order.
   The string 'Unix' might look like 'NUXI' on a machine with a
   different 'byte sex' (e.g., when transferring data from a

```
            little-endian
             to a
            big-endian
            , or vice-versa).  See also

            middle-endian
            ,
            swab
            , and
            bytesexual
            .
```

nybble /nib'l/ (alt. 'nibble') n. [from
   v. 'nibble' by analogy with 'bite' => 'byte'] Four
   bits; one
```
            hex
             digit; a half-byte.  Though 'byte' is now
```
   techspeak, this useful relative is still jargon. Compare

```
            byte
            ; see also
            bit
            , Apparently the 'nybble' spelling is
```
   uncommon in Commonwealth Hackish, as British orthography suggests
   the pronunciation /ni:'bl/.

   Following 'bit', 'byte' and 'nybble' there have been quite a few
   analogical attempts to construct unambiguous terms for bit blocks
   of other sizes. All of these are strictly jargon, not techspeak,
   and not very common jargon at that (most hackers would recognize
   them in context but not use them spontaneously). We collect them
   here for reference together with the ambiguous techspeak terms
   'word', 'half-word' and 'quadwords'; some (indicated) have
   substantial information separate entries.
      2 bits:

```
        o
                crumb
                ,
                quad

                quarter
                , tayste
    4 bits:
        nybble
    5 bits:

                nickle
                    10 bits:

                deckle
                    16 bits:
        playte,
                chawmp
                 (on a 32-bit machine), word (on a 16-bit
        machine), half-word (on a 32-bit machine).
    18 bits:

                chawmp
                 (on a 36-bit machine), half-word (on a 36-bit machine)
    32 bits:
        dynner,
                gawble
                 (on a 32-bit machine), word (on a 32-
        machine), longword (on a 16-bit machine).
    36:
        word (on a 36-bit machine)
    48 bits:

                gawble
                 (under circumstances that remain obscure)
```

   The fundamental motivation for most of these jargon terms (aside
   from the normal hackerly enjoyment of punning wordplay) is the
   extreme ambiguity of the term 'word' and its derivatives.

nyetwork /nyet'werk/ n. [from Russian 'nyet' = no] A
   network, when it is acting
                flaky
                 or is
                down
                . Compare

                notwork
                .

1.20 O

                Ob- /ob/ pref. Obligatory. A piece of
                netiquette

                  acknowledging that the author has been straying from the
   newsgroup's charter topic. For example, if a posting in alt.sex is
   a response to a part of someone else's posting that has nothing
   particularly to do with sex, the author may append 'ObSex' (or
   'Obsex') and toss off a question or vignette about some unusual
   erotic act. It is considered a sign of great
                  winnitude
                   when
   one's Obs are more interesting than other people's whole postings.

Obfuscated C Contest n. (in full, the 'International
   Obfuscated C Code Contest', or IOCCC) An annual contest run since
   1984 over Usenet by Landon Curt Noll and friends. The overall
   winner is whoever produces the most unreadable, creative, and
   bizarre (but working) C program; various other prizes are awarded
   at the judges' whim. C's terse syntax and macro-preprocessor
   facilities give contestants a lot of maneuvering room. The winning
   programs often manage to be simultaneously (a) funny, (b)
   breathtaking works of art, and (c) horrible examples of how
   not to code in C.

   This relatively short and sweet entry might help convey the flavor
   of obfuscated C:

```
     /*
      * HELLO WORLD program
      * by Jack Applin and Robert Heckendorn, 1985
      */
     main(v,c)char**c;{for(v[c++]="Hello, world!\n)";
     (!!c)[*c]&&(v--||--c&&execlp(*c,*c,c[!!c]+!!c,!c));
     **c=!c)write(!!*c,*c,!!**c);}
```

   Here's another good one:

```
     /*
      * Program to compute an approximation of pi
      *  by Brian Westley, 1988
      */

     #define _ -F<00||--F-OO--;
     int F=00,OO=00;
     main(){F_OO();printf("%1.3f\n",4.*-F/OO/OO);}F_OO()
     {
                 _-_-_-_
            _-_-_-_-_-_-_-_
         _-_-_-_-_-_-_-_-_-_-_
       _-_-_-_-_-_-_-_-_-_-_-_-_
      _-_-_-_-_-_-_-_-_-_-_-_-_-_
      _-_-_-_-_-_-_-_-_-_-_-_-_-
     _-_-_-_-_-_-_-_-_-_-_-_-_-_
     _-_-_-_-_-_-_-_-_-_-_-_-_-_
     _-_-_-_-_-_-_-_-_-_-_-_-_-
     _-_-_-_-_-_-_-_-_-_-_-_-_-
      _-_-_-_-_-_-_-_-_-_-_-_-_
      _-_-_-_-_-_-_-_-_-_-_-_-_
       _-_-_-_-_-_-_-_-_-_-_-_
        _-_-_-_-_-_-_-_-_-_-_
```

```
              _-_-_-_-_-_-_-_-
                 _-_-_-_
      }
   Note that this program works by computing its own area.  For more
   digits, write a bigger program.  See also
                 hello, world
                 .
```

obi-wan error /oh'bee-won` er'*r/ n. [RPI, from
   'off-by-one' and the Obi-Wan Kenobi character in "Star
   Wars"] A loop of some sort in which the index is off by 1. Common
   when the index should have started from 0 but instead started from
   1. A kind of
                 off-by-one error
                 . See also
                 zeroth
                 .

Objectionable-C n. Hackish take on "Objective-C", the
   name of an object-oriented dialect of C in competition with the
   better-known C++ (it is used to write native applications on the
   NeXT machine). Objectionable-C uses a Smalltalk-like syntax, but
   lacks the flexibility of Smalltalk method calls, and (like many
   such efforts) comes frustratingly close to attaining the

                 Right Thing
                  without actually doing so.

obscure adj. Used in an exaggeration of its normal meaning,
   to imply total incomprehensibility. "The reason for that last
   crash is obscure." "The 'find(1)' command's syntax is
   obscure!" The phrase 'moderately obscure' implies that
   something could be figured out but probably isn't worth the
   trouble. The construction 'obscure in the extreme' is the
   preferred emphatic form.

octal forty /ok'tl for'tee/ n. Hackish way of saying
   "I'm drawing a blank." Octal 40 is the
                 ASCII
                  space
   character, 0100000; by an odd coincidence,
                 hex
                  40 (01000000)
   is the
                 EBCDIC
                  space character. See
                 wall
                 .

off the trolley adj. Describes the behavior of a program
   that malfunctions and goes catatonic, but doesn't actually

                 crash
                  or abort. See
                 glitch
                 ,

                    bug
                    ,
                    deep space
                    .

off-by-one error n. Exceedingly common error induced in
    many ways, such as by starting at 0 when you should have started at
    1 or vice-versa, or by writing '< N' instead of '<= N' or
    vice-versa. Also applied to giving something to the person next to
    the one who should have gotten it. Often confounded with

                    fencepost error
                    , which is properly a particular subtype of it.

offline adv. Not now or not here. "Let's take this
    discussion offline." Specifically used on
                    Usenet
                     to suggest
    that a discussion be moved off a public newsgroup to email.

ogg /og/ v. [CMU] 1. In the multi-player space combat
    game Netrek, to execute kamikaze attacks against enemy ships which
    are carrying armies or occupying strategic positions. Named during
    a game in which one of the players repeatedly used the tactic while
    playing Orion ship G, showing up in the player list as "Og".
    This trick has been roundly denounced by those who would return to
    the good old days when the tactic of dogfighting was dominant, but
    as Sun Tzu wrote, "What is of supreme importance in war is to
    attack the enemy's strategy." However, the traditional answer to
    the newbie question "What does ogg mean?" is just "Pick up some
    armies and I'll show you." 2. In other games, to forcefully
    attack an opponent with the expectation that the resources expended
    will be renewed faster than the opponent will be able to regain his
    previous advantage. Taken more seriously as a tactic since it has
    gained a simple name. 3. To do anything forcefully, possibly
    without consideration of the drain on future resources. "I guess
    I'd better go ogg the problem set that's due tomorrow." "Whoops!
    I looked down at the map for a sec and almost ogged that oncoming
    car."

old fart n. Tribal elder. A title self-assumed with
    remarkable frequency by (esp.) Usenetters who have been
    programming for more than about 25 years; often appears in

                    sig block
                    s attached to Jargon File contributions of great
    archeological significance. This is a term of insult in the second
    or third person but one of pride in first person.

Old Testament n. [C programmers] The first edition of

                    K&R
                    , the sacred text describing
                    Classic C
                    .

one-banana problem n. At mainframe shops, where the

computers have operators for routine administrivia, the programmers
and hardware people tend to look down on the operators and claim
that a trained monkey could do their job. It is frequently
observed that the incentives that would be offered said monkeys can
be used as a scale to describe the difficulty of a task. A
one-banana problem is simple; hence, "It's only a one-banana job
at the most; what's taking them so long?"

At IBM, folklore divides the world into one-, two-, and
three-banana problems. Other cultures have different hierarchies
and may divide them more finely; at ICL, for example, five grapes
(a bunch) equals a banana. Their upper limit for the in-house

          sysape
          s is said to be two bananas and three grapes (another
source claims it's three bananas and one grape, but observes
"However, this is subject to local variations, cosmic rays and
ISO"). At a complication level any higher than that, one asks the
manufacturers to send someone around to check things.

See also
          Infinite-Monkey Theorem
          .

one-line fix n. Used (often sarcastically) of a change to a
   program that is thought to be trivial or insignificant right up to
   the moment it crashes the system. Usually 'cured' by another
   one-line fix. See also
          I didn't change anything!
          one-liner wars n. A game popular among hackers who code in
   the language APL (see
          write-only language
           and
          line noise
). The
   objective is to see who can code the most interesting
   and/or useful routine in one line of operators chosen from APL's
   exceedingly
          hairy
           primitive set. A similar amusement was
   practiced among
          TECO
           hackers and is now popular among

          Perl
           aficionados.

   Ken Iverson, the inventor of APL, has been credited with a
   one-liner that, given a number N, produces a list of the
   prime numbers from 1 to N inclusive. It looks like this:

        (2 = 0 +.= T o.| T) / T <- iN

   where 'o' is the APL null character, the assignment arrow is a
   single character, and 'i' represents the APL iota.

ooblick /oo'blik/ n.   [from the Dr. Seuss title

"Bartholomew and the Oobleck"] A bizarre semi-liquid sludge
made from cornstarch and water. Enjoyed among hackers who make
batches during playtime at parties for its amusing and extremely
non-Newtonian behavior; it pours and splatters, but resists rapid
motion like a solid and will even crack when hit by a hammer.
Often found near lasers.

Here is a field-tested ooblick recipe contributed by GLS:

     1 cup cornstarch
     1 cup baking soda
     3/4 cup water
     N drops of food coloring

This recipe isn't quite as non-Newtonian as a pure cornstarch
ooblick, but has an appropriately slimy feel.

Some, however, insist that the notion of an ooblick *recipe*
is far too mechanical, and that it is best to add the water in
small increments so that the various mixed states the cornstarch
goes through as it *becomes* ooblick can be grokked in
fullness by many hands. For optional ingredients of this
experience, see the "
                Ceremonial Chemicals
                " section of
     Appendix B.

op /op/ n. 1. In England and Ireland, common verbal
   abbreviation for 'operator', as in system operator. Less common in
   the U.S., where
                sysop
                 seems to be preferred. 2. [IRC] Someone
   who is endowed with privileges on
                IRC
                , not limited to a
   particular channel. These are generally people who are in charge
   of the IRC server at their particular site. Sometimes used
   interchangeably with
                CHOP
                . Compare
                sysop
                .

open n. Abbreviation for 'open (or left) parenthesis' ---
   used when necessary to eliminate oral ambiguity. To read aloud the
   LISP form (DEFUN FOO (X) (PLUS X 1)) one might say: "Open defun
   foo, open eks close, open, plus eks one, close close."

Open DeathTrap n. Abusive hackerism for the Santa Cruz
   Operation's 'Open DeskTop' product, a Motif-based graphical
   interface over their Unix. The funniest part is that this was
   coined by SCO's own developers.... Compare
                AIDX
                ,
                Macintrash

```
            Nominal Semidestructor

            ,
            ScumOS

            ,
            sun-stools

            ,
            HP-SUX

            .
```

open switch n. [IBM: prob. from railroading] An
   unresolved question, issue, or problem.

operating system n. [techspeak] (Often abbreviated 'OS')
   The foundation software of a machine, of course; that which
   schedules tasks, allocates storage, and presents a default
   interface to the user between applications. The facilities an
   operating system provides and its general design philosophy exert
   an extremely strong influence on programming style and on the
   technical cultures that grow up around its host machines. Hacker
   folklore has been shaped primarily by the
            Unix

            ,
            ITS

            ,

            TOPS-10

            ,
            TOPS-20
            /
            TWENEX

            ,
            WAITS

            ,
            CP/M

            ,

            MS-DOS
            , and
            Multics
             operating systems (most importantly
   by ITS and Unix).

optical diff n. See
            vdiff

            .

optical grep n. See
            vgrep

            .

optimism n. What a programmer is full of after fixing the
   last bug and before discovering the *next* last bug. Fred
   Brooks's book "The Mythical Man-Month" (See "Brooks's
   Law") contains the following paragraph that describes this
   extremely well:

      All programmers are optimists. Perhaps this modern sorcery
      especially attracts those who believe in happy endings and fairy
      godmothers. Perhaps the hundreds of nitty frustrations drive
      away all but those who habitually focus on the end goal. Perhaps
      it is merely that computers are young, programmers are younger,
      and the young are always optimists. But however the selection
      process works, the result is indisputable: "This time it will
      surely run," or "I just found the last bug.".

   See also
               Lubarsky's Law of Cybernetic Entomology
               .

Orange Book n. The U.S. Government's standards document
   "Trusted Computer System Evaluation Criteria, DOD standard
   5200.28-STD, December, 1985" which characterize secure computing
   architectures and defines levels A1 (most secure) through D
   (least). Stock Unixes are roughly C1, and can be upgraded to about
   C2 without excessive pain. See also
               crayola books
               ,
               book titles
               .

oriental food n. Hackers display an intense tropism
   towards oriental cuisine, especially Chinese, and especially of the
   spicier varieties such as Szechuan and Hunan. This phenomenon
   (which has also been observed in subcultures that overlap heavily
   with hackerdom, most notably science-fiction fandom) has never been
   satisfactorily explained, but is sufficiently intense that one can
   assume the target of a hackish dinner expedition to be the best
   local Chinese place and be right at least three times out of four.
   See also
               ravs
               ,
               great-wall
               ,
               stir-fried random
               ,
               laser chicken
               ,
               Yu-Shiang Whole Fish
               . Thai, Indian,
   Korean, and Vietnamese cuisines are also quite popular.

orphan n. [Unix] A process whose parent has died; one
   inherited by 'init(1)'. Compare
               zombie
               .

orphaned i-node /or'f*nd i:'nohd/ n.   [Unix]
   1. [techspeak] A file that retains storage but no longer appears in
   the directories of a filesystem. 2. By extension, a pejorative for
   any person no longer serving a useful function within some
   organization, esp.
               lion food

                    without subordinates.

orthogonal adj. [from mathematics] Mutually independent;
   well separated; sometimes, irrelevant to. Used in a generalization
   of its mathematical meaning to describe sets of primitives or
   capabilities that, like a vector basis in geometry, span the entire
   'capability space' of the system and are in some sense
   non-overlapping or mutually independent. For example, in
   architectures such as the PDP-11 or VAX where all or nearly all
   registers can be used interchangeably in any role with respect to
   any instruction, the register set is said to be orthogonal. Or, in
   logic, the set of operators 'not' and 'or' is orthogonal, but
   the set 'nand', 'or', and 'not' is not (because any one of
   these can be expressed in terms of the others). Also used in
   comments on human discourse: "This may be orthogonal to the
   discussion, but...."

OS /O-S/ 1. [Operating System] n. An abbreviation heavily
   used in email, occasionally in speech. 2. n.,obs. On ITS, an
   output spy. See "
                OS and JEDGAR
                " in Appendix A.

OS/2 /O S too/ n. The anointed successor to MS-DOS for
   Intel 286- and 386-based micros; proof that IBM/Microsoft couldn't
   get it right the second time, either. Often called 'Half-an-OS'.
   Mentioning it is usually good for a cheap laugh among hackers ---
   the design was so
                baroque
                , and the implementation of 1.x so
   bad, that 3 years after introduction you could still count the
   major
                app
                s shipping for it on the fingers of two hands -- in
   unary. The 2.x versions are said to have improved somewhat, and
   informed hackers now rate them superior to Microsoft Windows (an
   endorsement which, however, could easily be construed as damning
   with faint praise). See
                monstrosity
                ,
                cretinous
                ,

                second-system effect
                .

OSU /O-S-U/ n.,obs. [TMRC] Acronym for Officially
   Sanctioned User; a user who is recognized as such by the computer
   authorities and allowed to use the computer above the objections of
   the security monitor.

OTOH // [USENET] On The Other Hand.

out-of-band adj. [from telecommunications and network
   theory] 1. In software, describes values of a function which are
   not in its 'natural' range of return values, but are rather
   signals that some kind of exception has occurred. Many C

functions, for example, return a nonnegative integral value, but
indicate failure with an out-of-band return value of -1.
Compare
                hidden flag
                ,
                green bytes
                ,
                fence
                . 2. Also
sometimes used to describe what communications people call
'shift characters', such as the ESC that leads control sequences
for many terminals, or the level shift indicators in the old 5-bit
Baudot codes. 3. In personal communication, using methods other
than email, such as telephones or
                snail-mail
                .

overflow bit n. 1. [techspeak] A
                flag
                on some
processors indicating an attempt to calculate a result too large
for a register to hold. 2. More generally, an indication of any
kind of capacity overload condition. "Well, the
                Ada
                description was
                baroque
                all right, but I could hack it OK
until they got to the exception handling ... that set my
overflow bit." 3. The hypothetical bit that will be set if a
hacker doesn't get to make a trip to the Room of Porcelain
Fixtures: "I'd better process an internal interrupt before the
overflow bit gets set".

overflow pdl n. [MIT] The place where you put things when
   your
                pdl
                is full. If you don't have one and too many things
get pushed, you forget something. The overflow pdl for a person's
memory might be a memo pad. This usage inspired the following
doggerel:

   Hey, diddle, diddle
   The overflow pdl
      To get a little more stack;
   If that's not enough
   Then you lose it all,
      And have to pop all the way back.
                                        --The Great Quux

   The term
                pdl
                seems to be primarily an MITism; outside MIT this
term is replaced by 'overflow
                stack
                '.

overrun n. 1. [techspeak] Term for a frequent consequence

of data arriving faster than it can be consumed, esp. in serial
line communications. For example, at 9600 baud there is almost
exactly one character per millisecond, so if a
                silo
                 can hold
only two characters and the machine takes longer than 2 msec to get
to service the interrupt, at least one character will be lost.
2. Also applied to non-serial-I/O communications. "I forgot to
pay my electric bill due to mail overrun." "Sorry, I got four
phone calls in 3 minutes last night and lost your message to
overrun." When
                thrash
                ing at tasks, the next person to make a
request might be told "Overrun!" Compare
                firehose syndrome
                .
3. More loosely, may refer to a
                buffer overflow
                 not
necessarily related to processing time (as in
                overrun screw
).

overrun screw n. [C programming] A variety of
                fandango on core
                 produced by scribbling past the end of an array (C
implementations typically have no checks for this error). This is
relatively benign and easy to spot if the array is static; if it is
auto, the result may be to
                smash the stack
                 -- often resulting
in
                heisenbug
                s of the most diabolical subtlety. The term
'overrun screw' is used esp. of scribbles beyond the end of
arrays allocated with 'malloc(3)'; this typically trashes the
allocation header for the next block in the
                arena
                , producing
massive lossage within malloc and often a core dump on the next
operation to use 'stdio(3)' or 'malloc(3)' itself. See

                spam
                ,
                overrun
                ; see also
                memory leak
                ,
                memory smash
                ,

                aliasing bug
                ,
                precedence lossage
                ,
                fandango on core
                ,

secondary damage

.

1.21   P

P-mail n.   Physical mail, as opposed to
email
.   Synonymous
   with
snail-mail
.

P.O.D. /P-O-D/ Acronym for 'Piece Of Data' (as opposed
   to a code section).   Usage: pedantic and rare.   See also
pod
.

padded cell n.   Where you put
luser
s so they can't hurt
   anything.   A program that limits a luser to a carefully restricted
   subset of the capabilities of the host system (for example, the
   'rsh(1)' utility on USG Unix).   Note that this is different
   from an
iron box
   because it is overt and not aimed at
   enforcing security so much as protecting others (and the luser)
   from the consequences of the luser's boundless naivete (see

naive
).   Also 'padded cell environment'.

page in v.   [MIT] 1. To become aware of one's surroundings
   again after having paged out (see
page out
).   Usually confined
   to the sarcastic comment: "Eric pages in,
film at 11
!"
   2. Syn. 'swap in'; see
swap
.

page out vi.   [MIT] 1. To become unaware of one's
   surroundings temporarily, due to daydreaming or preoccupation.
   "Can you repeat that? I paged out for a minute."   See
page in
.
   Compare
glitch
,
thinko
.   2. Syn. 'swap out'; see

```
                swap
                .
```

pain in the net n. A
                flamer
                .

Pangloss parity n. [from Dr. Pangloss, the eternal optimist
   in Voltaire's "Candide"] In corporate DP shops, a common
   condition of severe but equally shared
                lossage
                 resulting from
   the theory that as long as everyone in the organization has the
   exactly the *same* model of obsolete computer, everything will
   be fine.

paper-net n. Hackish way of referring to the postal
   service, analogizing it to a very slow, low-reliability network.
   Usenet
                sig block
                s sometimes include a "Paper-Net:" header
   just before the sender's postal address; common variants of this
   are "Papernet" and "P-Net". Note that the standard

                netiquette
                 guidelines discourage this practice as a waste of
   bandwidth, since netters are quite unlikely to casually use postal
   addresses. Compare
                voice-net
                ,
                snail-mail
                ,
                P-mail
                .

param /p*-ram'/ n. Shorthand for 'parameter'. See
   also
                parm
                ; compare
                arg
                ,
                var
                .

PARC n. See
                XEROX PARC
                .

parent message n. What a
                followup
                 follows up.

parity errors pl.n. Little lapses of attention or (in more
   severe cases) consciousness, usually brought on by having spent all
   night and most of the next day hacking. "I need to go home and
   crash; I'm starting to get a lot of parity errors." Derives from

a relatively common but nearly always correctable transient error
in RAM hardware. Parity errors can also afflict mass storage and
serial communication lines; this is more serious because not always
correctable.

Parkinson's Law of Data prov. "Data expands to fill the
space available for storage"; buying more memory encourages the
use of more memory-intensive techniques. It has been observed over
the last 10 years that the memory usage of evolving systems tends
to double roughly once every 18 months. Fortunately, memory
density available for constant dollars also tends to double about
once every 12 months (see
              Moore's Law
              ); unfortunately, the
laws of physics guarantee that the latter cannot continue
indefinitely.

parm /parm/ n. Further-compressed form of
              param
              .
This term is an IBMism, and written use is almost unknown
outside IBM shops; spoken /parm/ is more widely distributed, but
the synonym
              arg
               is favored among hackers. Compare
              arg
              ,

              var
              .

parse [from linguistic terminology] vt. 1. To determine the
syntactic structure of a sentence or other utterance (close to the
standard English meaning). "That was the one I saw you." "I
can't parse that." 2. More generally, to understand or
comprehend. "It's very simple; you just kretch the glims and then
aos the zotz." "I can't parse that." 3. Of fish, to have to
remove the bones yourself. "I object to parsing fish", means "I
don't want to get a whole fish, but a sliced one is okay". A
'parsed fish' has been deboned. There is some controversy over
whether 'unparsed' should mean 'bony', or also mean
'deboned'.

Pascal n. An Algol-descended language designed by Niklaus
Wirth on the CDC 6600 around 1967--68 as an instructional tool for
elementary programming. This language, designed primarily to keep
students from shooting themselves in the foot and thus extremely
restrictive from a general-purpose-programming point of view, was
later promoted as a general-purpose tool and, in fact, became the
ancestor of a large family of languages including Modula-2 and

              Ada
               (see also
              bondage-and-discipline language
). The
hackish point of view on Pascal was probably best summed up by a
devastating (and, in its deadpan way, screamingly funny) 1981 paper

by Brian Kernighan (of

K&R

fame) entitled "Why Pascal is
Not My Favorite Programming Language", which was turned down by the
technical journals but circulated widely via photocopies. It was
eventually published in "Comparing and Assessing Programming
Languages", edited by Alan Feuer and Narain Gehani (Prentice-Hall,
1984). Part of his discussion is worth repeating here, because its
criticisms are still apposite to Pascal itself after ten years of
improvement and could also stand as an indictment of many other
bondage-and-discipline languages. At the end of a summary of the
case against Pascal, Kernighan wrote:

   9. There is no escape

   This last point is perhaps the most important. The language is
   inadequate but circumscribed, because there is no way to escape
   its limitations. There are no casts to disable the type-checking
   when necessary. There is no way to replace the defective
   run-time environment with a sensible one, unless one controls the
   compiler that defines the "standard procedures". The language is
   closed.

   People who use Pascal for serious programming fall into a fatal
   trap. Because the language is impotent, it must be extended.
   But each group extends Pascal in its own direction, to make it
   look like whatever language they really want. Extensions for
   separate compilation, FORTRAN-like COMMON, string data types,
   internal static variables, initialization, octal numbers, bit
   operators, etc., all add to the utility of the language for one
   group but destroy its portability to others.

   I feel that it is a mistake to use Pascal for anything much
   beyond its original target. In its pure form, Pascal is a toy
   language, suitable for teaching but not for real programming.

   Pascal has since been almost entirely displaced (by

C

) from the
niches it had acquired in serious applications and systems
programming, but retains some popularity as a hobbyist language in
the MS-DOS and Macintosh worlds.

pastie /pay'stee/ n. An adhesive-backed label designed to
   be attached to a key on a keyboard to indicate some non-standard
   character which can be accessed through that key. Pasties are
   likely to be used in APL environments, where almost every key is
   associated with a special character. A pastie on the R key, for
   example, might remind the user that it is used to generate the
   rho character. The term properly refers to
   nipple-concealing devices formerly worn by strippers in concession
   to indecent-exposure laws; compare

   tits on a keyboard

   .

patch 1. n. A temporary addition to a piece of code,
   usually as a

quick-and-dirty
remedy to an existing bug or
misfeature. A patch may or may not work, and may or may not
eventually be incorporated permanently into the program.
Distinguished from a
diff
or
mod
by the fact that a patch
is generated by more primitive means than the rest of the program;
the classical examples are instructions modified by using the front
panel switches, and changes made directly to the binary executable
of a program originally written in an
HLL
. Compare

one-line fix
. 2. vt. To insert a patch into a piece of code.
3. [in the Unix world] n. A
diff
(sense 2). 4. A set of
modifications to binaries to be applied by a patching program. IBM
operating systems often receive updates to the operating system in
the form of absolute hexadecimal patches. If you have modified
your OS, you have to disassemble these back to the source. The
patches might later be corrected by other patches on top of them
(patches were said to "grow scar tissue"). The result was often
a convoluted
patch space
and headaches galore. 5. [Unix] the
'patch(1)' program, written by Larry Wall, which automatically
applies a patch (sense 3) to a set of source code.

There is a classic story of a
tiger team
penetrating a secure
military computer that illustrates the danger inherent in binary
patches (or, indeed, any patches that you can't -- or don't ---
inspect and examine before installing). They couldn't find any

trap door
s or any way to penetrate security of IBM's OS, so
they made a site visit to an IBM office (remember, these were
official military types who were purportedly on official business),
swiped some IBM stationery, and created a fake patch. The patch
was actually the trapdoor they needed. The patch was distributed
at about the right time for an IBM patch, had official stationery
and all accompanying documentation, and was dutifully installed.
The installation manager very shortly thereafter learned something
about proper procedures.

patch space n. An unused block of bits left in a binary so
that it can later be modified by insertion of machine-language
instructions there (typically, the patch space is modified to
contain new code, and the superseded code is patched to contain a
jump or call to the patch space). The widening use of HLLs has
made this term rare; it is now primarily historical outside IBM

    shops. See
                    patch
                     (sense 4),
                    zap
                     (sense 4),
                    hook
                     .

path n.   1. A
                    bang path
                     or explicitly routed

                    Internet address
                    ; a node-by-node specification of a link
    between two machines. 2. [Unix] A filename, fully specified
    relative to the root directory (as opposed to relative to the
    current directory; the latter is sometimes called a 'relative
    path'). This is also called a 'pathname'. 3. [Unix and MS-DOS]
    The 'search path', an environment variable specifying the
    directories in which the
                    shell
                      (COMMAND.COM, under MS-DOS)
    should look for commands. Other, similar constructs abound under
    Unix (for example, the C preprocessor has a 'search path' it
    uses in looking for '#include' files).

pathological adj. 1. [scientific computation] Used of a
    data set that is grossly atypical of normal expected input, esp.
    one that exposes a weakness or bug in whatever algorithm one is
    using. An algorithm that can be broken by pathological inputs may
    still be useful if such inputs are very unlikely to occur in
    practice. 2. When used of test input, implies that it was
    purposefully engineered as a worst case. The implication in both
    senses is that the data is spectacularly ill-conditioned or that
    someone had to explicitly set out to break the algorithm in order
    to come up with such a crazy example. 3. Also said of an unlikely
    collection of circumstances. "If the network is down and comes up
    halfway through the execution of that command by root, the system
    may just crash." "Yes, but that's a pathological case." Often
    used to dismiss the case from discussion, with the implication that
    the consequences are acceptable, since they will happen so
    infrequently (if at all) that it doesn't seem worth going to the
    extra trouble to handle that case (see sense 1).

payware /pay'weir/ n. Commercial software. Oppose

                    shareware
                     or
                    freeware
                     .

PBD /P-B-D/ n. [abbrev. of 'Programmer Brain Damage']
    Applied to bug reports revealing places where the program was
    obviously broken by an incompetent or short-sighted programmer.
    Compare
                    UBD
                    ; see also

```
              brain-damaged
              .


PC-ism /P-C-izm/ n.  A piece of code or coding technique
   that takes advantage of the unprotected single-tasking environment
   in IBM PCs and the like, e.g., by busy-waiting on a hardware
   register, direct diddling of screen memory, or using hard timing
   loops.  Compare
              ill-behaved

              ,
              vaxism

              ,
              unixism
              . Also,
   'PC-ware' n., a program full of PC-isms on a machine with a more
   capable operating system.  Pejorative.


PD /P-D/ adj.  Common abbreviation for 'public domain',
   applied to software distributed over
              Usenet
               and from Internet
   archive sites.  Much of this software is not in fact public domain
   in the legal sense but travels under various copyrights granting
   reproduction and use rights to anyone who can
              snarf
               a copy.
   See
              copyleft
              .


PDL /P-D-L/, /pid'l/, /p*d'l/ or /puhd'l/
   1. n. 'Program Design Language'.  Any of a large class of formal
   and profoundly useless pseudo-languages in which
              management
                 forces one to design programs.  Too often, management expects  ←↩
                   PDL
   descriptions to be maintained in parallel with the code, imposing
   massive overhead to little or no benefit.  See also
              flowchart
              .
   2. v. To design using a program design language.  "I've been
   pdling so long my eyes won't focus beyond 2 feet."  3. n. 'Page
   Description Language'.  Refers to any language which is used to
   control a graphics device, usually a laserprinter.  The most common
   example is, of course, Adobe's
              PostScript
               language, but there
   are many others, such as Xerox InterPress, etc.


pdl /pid'l/ or /puhd'l/ n.  [abbreviation for 'Push Down
   List'] 1. In ITS days, the preferred MITism for
              stack
              . See

              overflow pdl
              . 2. Dave Lebling, one of the co-authors of
```

Zork
; (his
network address
 on the ITS machines was at one
time pdl@dms). 3. Rarely, any sense of
PDL
, as these are not
invariably capitalized.

PDP-10 n. [Programmed Data Processor model 10] The machine
   that made timesharing real. It looms large in hacker folklore
   because of its adoption in the mid-1970s by many university
   computing facilities and research labs, including the MIT AI Lab,
   Stanford, and CMU. Some aspects of the instruction set (most
   notably the bit-field instructions) are still considered
   unsurpassed. The 10 was eventually eclipsed by the VAX machines
   (descendants of the PDP-11) when DEC recognized that the 10 and VAX
   product lines were competing with each other and decided to
   concentrate its software development effort on the more profitable
   VAX. The machine was finally dropped from DEC's line in 1983,
   following the failure of the Jupiter Project at DEC to build a
   viable new model. (Some attempts by other companies to market
   clones came to nothing; see
Foonly
 and
Mars
.) This event
spelled the doom of
ITS
 and the technical cultures that had
spawned the original Jargon File, but by mid-1991 it had become
something of a badge of honorable old-timerhood among hackers to
have cut one's teeth on a PDP-10. See
TOPS-10
,
ITS
,

AOS
,
BLT
,
DDT
,
DPB
,
EXCH
,
HAKMEM
,

JFCL
,
LDB
,
pop
,

```
                push
                .
```

PDP-20 n. The most famous computer that never was.

```
                PDP-10
                 computers running the
                TOPS-10
                 operating system
```
   were labeled 'DECsystem-10' as a way of differentiating them from
   the PDP-11. Later on, those systems running
```
                TOPS-20
                 were labeled
```
   'DECSYSTEM-20' (the block capitals being the result of a lawsuit
   brought against DEC by Singer, which once made a computer called
   'system-10'), but contrary to popular lore there was never a
   'PDP-20'; the only difference between a 10 and a 20 was the
   operating system and the color of the paint. Most (but not all)
   machines sold to run TOPS-10 were painted 'Basil Blue', whereas
   most TOPS-20 machines were painted 'Chinese Red' (often mistakenly
   called orange).

peek n.,vt. (and
```
                poke
                ) The commands in most
```
   microcomputer BASICs for directly accessing memory contents at an
   absolute address; often extended to mean the corresponding
   constructs in any
```
                HLL
                 (peek reads memory, poke modifies it).
```
   Much hacking on small, non-MMU micros consists of 'peek'ing
   around memory, more or less at random, to find the location where
   the system keeps interesting stuff. Long (and variably accurate)
   lists of such addresses for various computers circulate (see

```
                interrupt list, the
                ).  The results of 'poke's at these
```
   addresses may be highly useful, mildly amusing, useless but neat,
   or (most likely) total
```
                lossage
                 (see
                killer poke
                ).
```

   Since a
```
                real operating system
                 provides useful, higher-level
```
   services for the tasks commonly performed with peeks and pokes on
   micros, and real languages tend not to encourage low-level memory
   groveling, a question like "How do I do a peek in C?" is
   diagnostic of the
```
                newbie
                .  (Of course, OS kernels often have to
```
   do exactly this; a real C hacker would unhesitatingly, if
   unportably, assign an absolute address to a pointer variable and
   indirect through it.)

pencil and paper n. An archaic information storage and
   transmission device that works by depositing smears of graphite on
   bleached wood pulp. More recent developments in paper-based
   technology include improved 'write-once' update devices which use
   tiny rolling heads similar to mouse balls to deposit colored
   pigment. All these devices require an operator skilled at
   so-called 'handwriting' technique. These technologies are
   ubiquitous outside hackerdom, but nearly forgotten inside it. Most
   hackers had terrible handwriting to begin with, and years of
   keyboarding tend to have encouraged it to degrade further. Perhaps
   for this reason, hackers deprecate pencil-and-paper technology and
   often resist using it in any but the most trivial contexts.

peon n. A person with no special (
                  root
                   or
                  wheel
)
   privileges on a computer system. "I can't create an account on
   foovax for you; I'm only a peon there."

percent-S /per-sent' es'/ n. [From the code in C's
   'printf(3)' library function used to insert an arbitrary
   string argument] An unspecified person or object. "I was just
   talking to some percent-s in administration." Compare

                  random
                  .

perf /perf/ n. Syn.
                  chad
                   (sense 1). The term
   'perfory' /per'f*-ree/ is also heard. The term
                  perf
                   may
   also refer to the perforations themselves, rather than the chad
   they produce when torn.

perfect programmer syndrome n. Arrogance; the egotistical
   conviction that one is above normal human error. Most frequently
   found among programmers of some native ability but relatively
   little experience (especially new graduates; their perceptions may
   be distorted by a history of excellent performance at solving

                  toy problem
                  s). "Of course my program is correct, there is no
   need to test it." "Yes, I can see there may be a problem here,
   but *I'll* never type 'rm -r /' while in
                  root mode
                  ."

Perl /perl/ n. [Practical Extraction and Report Language,
   a.k.a. Pathologically Eclectic Rubbish Lister] An interpreted
   language developed by Larry Wall (<lwall@jpl.nasa.gov>, author
   of 'patch(1)' and 'rn(1)') and distributed over Usenet.
   Superficially resembles
                  awk

                     , but is much hairier, including
    many facilities reminiscent of `sed(1)' and shells and a
    comprehensive Unix system-call interface. Unix sysadmins, who are
    almost always incorrigible hackers, increasingly consider it one of
    the
                languages of choice
                . Perl has been described, in a parody
    of a famous remark about `lex(1)', as the "Swiss-Army
    chainsaw" of Unix programming.

person of no account n. [University of California at Santa
    Cruz] Used when referring to a person with no
                network address
                ,
    frequently to forestall confusion. Most often as part of an
    introduction: "This is Bill, a person of no account, but he used
    to be bill@random.com". Compare
                return from the dead
                .

pessimal /pes'im-l/ adj. [Latin-based antonym for
    `optimal'] Maximally bad. "This is a pessimal situation."
    Also `pessimize' vt. To make as bad as possible. These words are
    the obvious Latin-based antonyms for `optimal' and `optimize',
    but for some reason they do not appear in most English
    dictionaries, although `pessimize' is listed in the OED.

pessimizing compiler /pes'*-mi:z'ing k*m-pi:l'r/ n. A
    compiler that produces object [antonym of `optimizing compiler']
    code that is worse than the straightforward or obvious hand
    translation. The implication is that the compiler is actually
    trying to optimize the program, but through excessive cleverness is
    doing the opposite. A few pessimizing compilers have been written
    on purpose, however, as pranks or burlesques.

peta- /pe't*/ pref [SI] See
                quantifiers
                .

PETSCII /pet'skee/ n. [abbreviation of PET ASCII] The
    variation (many would say perversion) of the
                ASCII
                 character
    set used by the Commodore Business Machines PET series of personal
    computers and the later Commodore C64, C16, and C128 machines. The
    PETSCII set used left-arrow and up-arrow (as in old-style ASCII)
    instead of underscore and caret, placed the unshifted alphabet at
    positions 65--90, put the shifted alphabet at positions 193--218,
    and added graphics characters.

phage n. A program that modifies other programs or
    databases in unauthorized ways; esp. one that propagates a

                virus
                 or
                Trojan horse
                . See also

```
                worm
                ,

                mockingbird
                .  The analogy, of course, is with phage viruses in
    biology.
```

phase 1. n. The offset of one's waking-sleeping schedule
    with respect to the standard 24-hour cycle; a useful concept among
    people who often work at night and/or according to no fixed
    schedule. It is not uncommon to change one's phase by as much as 6
    hours per day on a regular basis. "What's your phase?" "I've
    been getting in about 8 P.M. lately, but I'm going to
                wrap around
                    to the day schedule by Friday." A person who is roughly
    12 hours out of phase is sometimes said to be in 'night mode'.
    (The term 'day mode' is also (but less frequently) used, meaning
    you're working 9 to 5 (or, more likely, 10 to 6).) The act of
    altering one's cycle is called 'changing phase'; 'phase
    shifting' has also been recently reported from Caltech.
    2. 'change phase the hard way': To stay awake for a very long
    time in order to get into a different phase. 3. 'change phase
    the easy way': To stay asleep, etc. However, some claim that
    either staying awake longer or sleeping longer is easy, and that it
    is *shortening* your day or night that is really hard (see

                wrap around
). The 'jet lag' that afflicts travelers who
    cross many time-zone boundaries may be attributed to two distinct
    causes: the strain of travel per se, and the strain of changing
    phase. Hackers who suddenly find that they must change phase
    drastically in a short period of time, particularly the hard way,
    experience something very like jet lag without traveling.

phase of the moon n. Used humorously as a random parameter
    on which something is said to depend. Sometimes implies
    unreliability of whatever is dependent, or that reliability seems
    to be dependent on conditions nobody has been able to determine.
    "This feature depends on having the channel open in mumble mode,
    having the foo switch set, and on the phase of the moon." See
    also
                heisenbug
                .

    True story: Once upon a time there was a bug that really did depend
    on the phase of the moon. There was a little subroutine that had
    traditionally been used in various programs at MIT to calculate an
    approximation to the moon's true phase. GLS incorporated this
    routine into a LISP program that, when it wrote out a file, would
    print a timestamp line almost 80 characters long. Very
    occasionally the first line of the message would be too long and
    would overflow onto the next line, and when the file was later read
    back in the program would
                barf
                . The length of the first line
    depended on both the precise date and time and the length of the
    phase specification when the timestamp was printed, and so the bug

literally depended on the phase of the moon!

The first paper edition of the Jargon File (Steele-1983) included
an example of one of the timestamp lines that exhibited this bug,
but the typesetter 'corrected' it. This has since been
described as the phase-of-the-moon-bug bug.

phase-wrapping n. [MIT] Syn.
                wrap around
                , sense 2.

phreaker /freek'r/ n. One who engages in

                phreaking
                .

phreaking /freek'ing/ n. [from 'phone phreak'] 1. The
   art and science of
                cracking
                 the phone network (so as, for
   example, to make free long-distance calls). 2. By extension,
   security-cracking in any other context (especially, but not
   exclusively, on communications networks) (see
                cracking
).

At one time phreaking was a semi-respectable activity among
hackers; there was a gentleman's agreement that phreaking as an
intellectual game and a form of exploration was OK, but serious
theft of services was taboo. There was significant crossover
between the hacker community and the hard-core phone phreaks who
ran semi-underground networks of their own through such media as
the legendary "TAP Newsletter". This ethos began to break
down in the mid-1980s as wider dissemination of the techniques put
them in the hands of less responsible phreaks. Around the same
time, changes in the phone network made old-style technical
ingenuity less effective as a way of hacking it, so phreaking came
to depend more on overtly criminal acts such as stealing phone-card
numbers. The crimes and punishments of gangs like the '414 group'
turned that game very ugly. A few old-time hackers still phreak
casually just to keep their hand in, but most these days have
hardly even heard of 'blue boxes' or any of the other
paraphernalia of the great phreaks of yore.

pico- pref. [SI: a quantifier
   meaning * 10^-12]
   Smaller than
                nano-
                ; used in the same rather loose
   connotative way as
                nano-
                 and
                micro-
                . This usage is not yet
   common in the way
                nano-
                 and

```
               micro-
                are, but should be
   instantly recognizable to any hacker.  See also
               quantifiers
               ,

               micro-
               .
```

pig, run like a v. To run very slowly on given hardware,
   said of software. Distinct from
               hog
               .

pilot error n. [Sun: from aviation] A user's
   misconfiguration or misuse of a piece of software, producing
   apparently buglike results (compare
               UBD
). "Joe Luser
   reported a bug in sendmail that causes it to generate bogus
   headers." "That's not a bug, that's pilot error. His
   'sendmail.cf' is hosed."

ping [from the submariners' term for a sonar pulse] 1. n.
   Slang term for a small network message (ICMP ECHO) sent by a
   computer to check for the presence and alertness of another. The
   Unix command 'ping(8)' can be used to do this manually (note
   that 'ping(8)''s author denies the widespread folk etymology
   that the name was ever intended as acronym 'Packet INternet
   Groper'). Occasionally used as a phone greeting. See
               ACK
               ,
   also
               ENQ
               . 2. vt. To verify the presence of. 3. vt. To get
   the attention of. 4. vt. To send a message to all members of a

               mailing list
                requesting an
               ACK
                (in order to verify that
   everybody's addresses are reachable). "We haven't heard much of
   anything from Geoff, but he did respond with an ACK both times I
   pinged jargon-friends." 5. n. A quantum packet of happiness.
   People who are very happy tend to exude pings; furthermore, one can
   intentionally create pings and aim them at a needy party (e.g., a
   depressed person). This sense of ping may appear as an
   exclamation; "Ping!" (I'm happy; I am emitting a quantum of
   happiness; I have been struck by a quantum of happiness). The form
   "pingfulness", which is used to describe people who exude pings,
   also occurs. (In the standard abuse of language, "pingfulness"
   can also be used as an exclamation, in which case it's a much
   stronger exclamation than just "ping"!). Oppose
               blargh
               .

The funniest use of `ping` to date was described in January 1991 by
Steve Hayman on the Usenet group comp.sys.next. He was trying
to isolate a faulty cable segment on a TCP/IP Ethernet hooked up to
a NeXT machine, and got tired of having to run back to his console
after each cabling tweak to see if the ping packets were getting
through. So he used the sound-recording feature on the NeXT, then
wrote a script that repeatedly invoked `ping(8)`, listened for
an echo, and played back the recording on each returned packet.
Result? A program that caused the machine to repeat, over and
over, "Ping ... ping ... ping ..." as long as the
network was up. He turned the volume to maximum, ferreted through
the building with one ear cocked, and found a faulty tee connector
in no time.

Pink-Shirt Book "The Peter Norton Programmer's Guide
   to the IBM PC". The original cover featured a picture of Peter
   Norton with a silly smirk on his face, wearing a pink shirt.
   Perhaps in recognition of this usage, the current edition has a
   different picture of Norton wearing a pink shirt. See also

              book titles
              .

PIP /pip/ vt.,obs. [Peripheral Interchange Program] To
   copy; from the program PIP on CP/M, RSX-11, RSTS/E, TOPS-10, and
   OS/8 (derived from a utility on the PDP-6) that was used for file
   copying (and in OS/8 and RT-11 for just about every other file
   operation you might want to do). It is said that when the program
   was originated, during the development of the PDP-6 in 1963, it was
   called ATLATL (`Anything, Lord, to Anything, Lord'; this played on
   the Nahuatl word `atlatl' for a spear-thrower, with connotations
   of utility and primitivity that were no doubt quite intentional).
   See also
              BLT
              ,
              dd
              ,
              cat
              .

pistol n. [IBM] A tool that makes it all too easy for you to
   shoot yourself in the foot. "Unix `rm *' makes such a nice
   pistol!"

pixel sort n. [Commodore users] Any compression routine
   which irretrievably loses valuable data in the process of

              crunch
              ing it. Disparagingly used for `lossy' methods such as
   JPEG. The theory, of course, is that these methods are only used on
   photographic images in which minor loss-of-data is not visible to
   the human eye. The term `pixel sort' implies distrust of this
   theory. Compare
              bogo-sort
              .

pizza box n. [Sun] The largish thin box housing the electronics

in (especially Sun) desktop workstations, so named because of its
size and shape and the dimpled pattern that looks like air holes.

Two meg single-platter removable disk packs used to be called
pizzas, and the huge drive they were stuck into was referred to as
a pizza oven. It's an index of progress that in the old days just
the disk was pizza-sized, while now the entire computer is.

pizza, ANSI standard /an'see stan'd*rd peet'z*/ [CMU]
   Pepperoni and mushroom pizza. Coined allegedly because most pizzas
   ordered by CMU hackers during some period leading up to mid-1990
   were of that flavor. See also
                rotary debugger
                ; compare

                tea, ISO standard cup of
                .

plaid screen n. [XEROX PARC] A 'special effect' that
   occurs when certain kinds of
                memory smash
                es overwrite the
   control blocks or image memory of a bit-mapped display. The term
   "salt and pepper" may refer to a different pattern of similar
   origin. Though the term as coined at PARC refers to the result of
   an error, some of the
                X
                 demos induce plaid-screen effects
   deliberately as a
                display hack
                .

plain-ASCII /playn-as'kee/ Syn.
                flat-ASCII
                .

plan file n. [Unix] On systems that support
                finger
                , the
   '.plan' file in a user's home directory is displayed when the user
   is fingered. This feature was originally intended to be used to
   keep potential fingerers apprised of one's location and near-future
   plans, but has been turned almost universally to humorous and
   self-expressive purposes (like a
                sig block
). See also

                Hacking X for Y
                .

   A recent innovation in plan files has been the introduction of
   "scrolling plan files" which are one-dimensional animations made
   using only the printable ASCII character set, carriage return and
   line feed, avoiding terminal specific escape sequences, since the

                finger
                 command will (for security reasons; see

```
               letterbomb
               ) not pass the escape character.

   Scrolling .plan files have become art forms in miniature, and some
   sites have started competitions to find who can create the longest
   running, funniest, and most original animations.  Various animation
   characters include:

      Centipede:
           mmmmme
      Lorry/Truck:
           oo-oP
      Andalusian Video Snail:
           _@/

   and a compiler (ASP) is available on Usenet for producing them.
   See also
               twirling baton
               .

platinum-iridium adj.  Standard, against which all others of
   the same category are measured.  Usage: silly.  The notion is that
   one of whatever it is has actually been cast in platinum-iridium
   alloy and placed in the vault beside the Standard Kilogram at the
   International Bureau of Weights and Measures near Paris.  (From
   1889 to 1960, the meter was defined to be the distance between two
   scratches in a platinum-iridium bar kept in that same vault ---
   this replaced an earlier definition as 10^(-7) times the
   distance between the North Pole and the Equator along a meridian
   through Paris; unfortunately, this had been based on an inexact
   value of the circumference of the Earth.  From 1960 to 1984 it was
   defined to be 1650763.73 wavelengths of the orange-red line of
   krypton-86 propagating in a vacuum.  It is now defined as the
   length of the path traveled by light in a vacuum in the time
   interval of 1/299,792,458 of a second.  The kilogram is now the
   only unit of measure officially defined in terms of a unique
   artifact.)  "This garbage-collection algorithm has been tested
   against the platinum-iridium cons cell in Paris."  Compare

               golden
               .

playpen n.  [IBM] A room where programmers work.  Compare

               salt mines
               .

playte /playt/  16 bits, by analogy with
               nybble
                and

               byte
               .  Usage: rare and extremely silly.  See also
               dynner
                  and
               crumb
```

                        . General discussion of such terms is under

                        nybble
                        .

plingnet /pling'net/ n.   Syn.
                        UUCPNET
                        . Also see

                        Commonwealth Hackish
                        , which uses 'pling' for
                        bang
                         (as
      in
                        bang path
).

plokta /plok't*/ v.   [acronym: Press Lots Of Keys To
    Abort] To press random keys in an attempt to get some response
    from the system. One might plokta when the abort procedure for a
    program is not known, or when trying to figure out if the system is
    just sluggish or really hung. Plokta can also be used while trying
    to figure out any unknown key sequence for a particular operation.
    Someone going into 'plokta mode' usually places both hands flat
    on the keyboard and mashes them down, hoping for some useful
    response.

    A slightly more directed form of plokta can often be seen in mail
    messages or Usenet articles from new users -- the text might end
    with

                        ^X^C
                        q
                        quit
                        :q
                        ^C
                        end
                        x
                        exit
                        ZZ
                        ^D
                        ?
                        help

    as the user vainly tries to find the right exit sequence, with the
    incorrect tries piling up at the end of the message....

plonk excl.,vt. [Usenet: possibly influenced by British
    slang 'plonk' for cheap booze, or 'plonker' for someone
    behaving stupidly (latter is lit. equivalent to Yiddish
    'schmuck')] The sound a
                        newbie
                         makes as he falls to the
      bottom of a
                        kill file
                        . While it originated in the

```
            newsgroup
             talk.bizarre, this term (usually written
   "*plonk*") is now (1994) widespread on Usenet as a form of public
   ridicule.

plugh /ploogh/ v.   [from the
            ADVENT
             game] See

            xyzzy
            .


plumbing n.   [Unix] Term used for
            shell
             code, so called
   because of the prevalence of 'pipelines' that feed the output of
   one program to the input of another.  Under Unix, user utilities
   can often be implemented or at least prototyped by a suitable
   collection of pipelines and temp-file grinding encapsulated in a
   shell script; this is much less effort than writing C every time,
   and the capability is considered one of Unix's major winning
   features.  A few other OSs such as IBM's VM/CMS support similar
   facilities.  Esp. used in the construction 'hairy plumbing'
   (see
            hairy
            ).  "You can kluge together a basic spell-checker
   out of 'sort(1)', 'comm(1)', and 'tr(1)' with a
   little plumbing."  See also
            tee
            .

PM /P-M/   1. v. (from 'preventive maintenance') To
   bring down a machine for inspection or test purposes.  See

            provocative maintenance
            ; see also
            scratch monkey
            .
   2. n. Abbrev. for 'Presentation Manager', an
            elephantine
             OS/2
   graphical user interface.

pnambic /p*-nam'bik/   [Acronym from the scene in the film
   version of "The Wizard of Oz" in which the true nature of the
   wizard is first discovered: "Pay no attention to the man behind
   the curtain."]  1. A stage of development of a process or function
   that, owing to incomplete implementation or to the complexity of
   the system, requires human interaction to simulate or replace some
   or all of the actions, inputs, or outputs of the process or
   function.  2. Of or pertaining to a process or function whose
   apparent operations are wholly or partially falsified.
   3. Requiring
            prestidigitization
            .

   The ultimate pnambic product was "Dan Bricklin's Demo", a program
```

which supported flashy user-interface design prototyping. There is
a related maxim among hackers: "Any sufficiently advanced
technology is indistinguishable from a rigged demo." See

        magic
, sense 1, for illumination of this point.

pod n. [allegedly from abbreviation POD for 'Prince Of
   Darkness'] A Diablo 630 (or, latterly, any letter-quality impact
   printer). From the DEC-10 PODTYPE program used to feed formatted
   text to it. Not to be confused with
        P.O.D.
.

point-and-drool interface n. Parody of the techspeak term
   'point-and-shoot interface', describing a windows, icons, and
   mouse-based interface such as is found on the Macintosh. The
   implication, of course, is that such an interface is only suitable
   for idiots. See
        for the rest of us
,
        WIMP environment
,

        Macintrash
,
        drool-proof paper
. Also 'point-and-grunt
   interface'.

poke n.,vt. See
        peek
.

poll v.,n. 1. [techspeak] The action of checking the status
   of an input line, sensor, or memory location to see if a particular
   external event has been registered. 2. To repeatedly call or check
   with someone: "I keep polling him, but he's not answering his
   phone; he must be swapped out." 3. To ask. "Lunch? I poll for
   a takeout order daily."

polygon pusher n. A chip designer who spends most of his or
   her time at the physical layout level (which requires drawing
   lots of multi-colored polygons). Also 'rectangle
   slinger'.

POM /P-O-M/ n. Common abbreviation for
        phase of the moon
.
   Usage: usually in the phrase 'POM-dependent', which means

        flaky
.

pop /pop/ [from the operation that removes the top of a
   stack, and the fact that procedure return addresses are usually
   saved on the stack] (also capitalized 'POP') 1. vt. To remove

     something from a
                 stack
                  or
                 pdl
                 . If a person says he/she
   has popped something from his stack, that means he/she has finally
   finished working on it and can now remove it from the list of
   things hanging overhead. 2. When a discussion gets to a level of
   detail so deep that the main point of the discussion is being lost,
   someone will shout "Pop!", meaning "Get back up to a higher
   level!" The shout is frequently accompanied by an upthrust arm
   with a finger pointing to the ceiling.

POPJ /pop'J/ n.,v. [from a
                 PDP-10
                    return-from-subroutine instruction] To return from a digression ↩
                    .
   By verb doubling, "Popj, popj" means roughly "Now let's see,
   where were we?" See
                 RTI
                 .

poser n. A
                 wannabee
                 ; not hacker slang, but used among
   crackers, phreaks and
                 warez d00dz
                 . Not as negative as

                 lamer
                  por
                 leech
                 . Probably derives from a similar usage
   among punk-rockers and metalheads, putting down those who "talk
   the talk but don't walk the walk".

post v. To send a message to a
                 mailing list
                  or

                 newsgroup
                 . Distinguished in context from 'mail'; one might
   ask, for example: "Are you going to post the patch or mail it to
   known users?"

postcardware n. A kind of
                 shareware
                  that borders on

                 freeware
                 , in that the author requests only that satisfied
   users send a postcard of their home town or something. (This
   practice, silly as it might seem, serves to remind users that they
   are otherwise getting something for nothing, and may also be
   psychologically related to real estate 'sales' in which $1
   changes hands just to keep the transaction from being a gift.)

posting n.   Noun corresp. to v.
                    post
                     (but note that

                    post
                     can be nouned). Distinguished from a 'letter' or
     ordinary
                    email
                     message by the fact that it is broadcast rather
     than point-to-point. It is not clear whether messages sent to a
     small mailing list are postings or email; perhaps the best dividing
     line is that if you don't know the names of all the potential
     recipients, it is a posting.

postmaster n.   The email contact and maintenance person at a
     site connected to the Internet or UUCPNET. Often, but not always,
     the same as the
                    admin
                    . The Internet standard for electronic
     mail (
                    RFC
                    -822) requires each machine to have a 'postmaster'
     address; usually it is aliased to this person.

PostScript n.   A Page Description Language (
                    PDL
                    ),
     based on work originally done by John Gaffney at Evans and
     Sutherland in 1976, evolving through 'JaM' ('John and Martin',
     Martin Newell) at
                    XEROX PARC
                    , and finally implemented in its
     current form by John Warnock et al. after he and Chuck Geschke
     founded Adobe Systems Incorporated in 1982. PostScript gets its
     leverage by using a full programming language, rather than a series
     of low-level escape sequences, to describe an image to be printed
     on a laser printer or other output device (in this it parallels

                    EMACS
                    , which exploited a similar insight about editing tasks).
     It is also noteworthy for implementing on-the fly rasterization,
     from Bezier curve descriptions, of high-quality fonts at low (e.g.
     300 dpi) resolution (it was formerly believed that hand-tuned
     bitmap fonts were required for this task). Hackers consider
     PostScript to be among the most elegant hacks of all time, and the
     combination of technical merits and widespread availability has
     made PostScript the language of choice for graphical output.

pound on vt.   Syn.
                    bang on
                    .

power cycle vt.   (also, 'cycle power' or just 'cycle')
     To power off a machine and then power it on immediately, with the
     intention of clearing some kind of
                    hung
                     or

                    gronk
                    ed state.
    Syn.

                    120 reset
                    ; see also
                    Big Red Switch
                    . Compare

                    Vulcan nerve pinch
                    ,
                    bounce
                     (sense 4), and
                    boot
                    , and
    see the "
                    AI Koans
                    " (in Appendix A) about Tom Knight
    and the novice.

power hit n. A spike or drop-out in the electricity
    supplying your machine; a power
                    glitch
                    . These can cause
    crashes and even permanent damage to your machine(s).

PPN /P-P-N/, /pip'n/ n.,obs. [from 'Project-Programmer
    Number'] A user-ID under
                    TOPS-10
                     and its various mutant
    progeny at SAIL, BBN, CompuServe, and elsewhere. Old-time hackers
    from the PDP-10 era sometimes use this to refer to user IDs on
    other systems as well.

precedence lossage /pre's*-dens los'*j/ n. [C
    programmers] Coding error in an expression due to unexpected
    grouping of arithmetic or logical operators by the compiler. Used
    esp. of certain common coding errors in C due to the
    nonintuitively low precedence levels of '&', '|',
    '^', '<<', and '>>' (for this reason, experienced C
    programmers deliberately forget the language's
                    baroque
                        precedence hierarchy and parenthesize defensively). Can always ←
                          be
    avoided by suitable use of parentheses.
                    LISP
                     fans enjoy
    pointing out that this can't happen in *their* favorite
    language, which eschews precedence entirely, requiring one to use
    explicit parentheses everywhere. See
                    aliasing bug
                    ,
                    memory leak
                    ,

                    memory smash
                    ,
                    smash the stack

```
                                   ,
                                   fandango on core
                                   ,
                                   overrun screw
                                   .
```

prepend /pree`pend'/ vt.  [by analogy with `append'] To
   prefix. As with `append' (but not `prefix' or `suffix' as a
   verb), the direct object is always the thing being added and not
   the original word (or character string, or whatever). "If you
   prepend a semicolon to the line, the translation routine will pass
   it through unaltered."

prestidigitization /pres`t*-di`j*-ti:-zay'sh*n/ n. 1. The
   act of putting something into digital notation via sleight of hand.
   2. Data entry through legerdemain.

pretty pictures n. [scientific computation] The next step
   up from
                   numbers
                   . Interesting graphical output from a program
   that may not have any sensible relationship to the system the
   program is intended to model. Good for showing to
                   management
                   .

prettyprint /prit'ee-print/ v. (alt. `pretty-print')
   1. To generate `pretty' human-readable output from a
                   hairy
                      internal representation; esp. used for the process of

                   grind
                   ing (sense 1) program code, and most esp. for LISP code.
   2. To format in some particularly slick and nontrivial way.

pretzel key n. [Mac users] See
                   feature key
                   .

priesthood n.,obs. [TMRC] The select group of system
   managers responsible for the operation and maintenance of a batch
   operated computer system. On these computers, a user never had
   direct access to a computer, but had to submit his/her data and
   programs to a priest for execution. Results were returned days or
   even weeks later. See
                   acolyte
                   .

prime time n. [from TV programming] Normal high-usage hours
   on a timesharing system; the day shift. Avoidance of prime time
   was traditionally given as a major reason for
                   night mode
                      hacking. The rise of the personal workstation has rendered ←
                         this
   term, along with timesharing itself, almost obsolete. The hackish
   tendency to late-night
```

```
              hacking run
              s has changed not a bit.
```

printing discussion n.   [XEROX PARC] A protracted,
   low-level, time-consuming, generally pointless discussion of
   something only peripherally interesting to all.

priority interrupt n.   [from the hardware term] Describes
   any stimulus compelling enough to yank one right out of

```
              hack mode
              .  Classically used to describe being dragged away by an

              SO
               for immediate sex, but may also refer to more mundane
   interruptions such as a fire alarm going off in the near vicinity.
   Also called an
              NMI
               (non-maskable interrupt), especially in
   PC-land.
```

profile n.   1. A control file for a program, esp. a text
   file automatically read from each user's home directory and
   intended to be easily modified by the user in order to customize
   the program's behavior. Used to avoid
```
              hardcoded
               choices (see
   also
              dot file
              ,
              rc file
              ).  2. [techspeak] A report on the
   amounts of time spent in each routine of a program, used to find
   and
              tune
               away the
              hot spot
              s in it.  This sense is often
   verbed.  Some profiling modes report units other than time (such as
   call counts) and/or report at granularities other than per-routine,
   but the idea is similar.
```

progasm /proh'gaz-m/ n.   [University of Wisconsin] The
   euphoria experienced upon the completion of a program or other
   computer-related project.

proglet /prog'let/ n.   [UK] A short extempore program
   written to meet an immediate, transient need. Often written in
   BASIC, rarely more than a dozen lines long, and containing no
   subroutines. The largest amount of code that can be written off
   the top of one's head, that does not need any editing, and that
   runs correctly the first time (this amount varies significantly
   according to one's skill and the language one is using). Compare

```
              toy program
              ,
              noddy
```

```
                    ,
                    one-liner wars
                    .
```

program n. 1. A magic spell cast over a computer allowing
    it to turn one's input into error messages. 2. An exercise in
    experimental epistemology. 3. A form of art, ostensibly intended
    for the instruction of computers, which is nevertheless almost
    inevitably a failure if other programmers can't understand it.

Programmer's Cheer "Shift to the left! Shift to the
    right! Pop up, push down! Byte! Byte! Byte!" A joke so old it
    has hair on it.

programming n. 1. The art of debugging a blank sheet of
    paper (or, in these days of on-line editing, the art of debugging
    an empty file). "Bloody instructions which, being taught, return
    to plague their inventor" (Macbeth, Act 1, Scene 7) 2. A pastime
    similar to banging one's head against a wall, but with fewer
    opportunities for reward. 3. The most fun you can have with your
    clothes on (although clothes are not mandatory).

programming fluid n. 1. Coffee. 2. Cola. 3. Any
    caffeinacious stimulant. Many hackers consider these essential for
    those all-night hacking runs. See
                    wirewater
                    .

propeller head n. Used by hackers, this is syn. with

                    computer geek
                    . Non-hackers sometimes use it to describe all
    techies. Prob. derives from SF fandom's tradition (originally
    invented by old-time fan Ray Faraday Nelson) of propeller beanies
    as fannish insignia (though nobody actually wears them except as a
    joke).

propeller key n. [Mac users] See
                    feature key
                    .

proprietary adj. 1. In
                    marketroid
                    -speak, superior;
    implies a product imbued with exclusive magic by the unmatched
    brilliance of the company's own hardware or software designers.
    2. In the language of hackers and users, inferior; implies a
    product not conforming to open-systems standards, and thus one that
    puts the customer at the mercy of a vendor able to gouge freely on
    service and upgrade charges after the initial sale has locked the
    customer in.

protocol n. As used by hackers, this never refers to
    niceties about the proper form for addressing letters to the Papal
    Nuncio or the order in which one should use the forks in a
    Russian-style place setting; hackers don't care about such things.
    It is used instead to describe any set of rules that allow

different machines or pieces of software to coordinate with each
other without ambiguity. So, for example, it does include niceties
about the proper form for addressing packets on a network or the
order in which one should use the forks in the Dining Philosophers
Problem. It implies that there is some common message format and
an accepted set of primitives or commands that all parties involved
understand, and that transactions among them follow predictable
logical sequences. See also
                handshaking
                ,
                do protocol
                .

provocative maintenance [common ironic mutation of
    'preventive maintenance'] Actions performed upon a machine at
    regularly scheduled intervals to ensure that the system remains in
    a usable state. So called because it is all too often performed by
    a
                field servoid
                 who doesn't know what he is doing; such
    'maintenance' often *induces* problems, or otherwise
    results in the machine's remaining in an *un*usable state for
    an indeterminate amount of time. See also
                scratch monkey
                .

prowler n. [Unix] A
                daemon
                 that is run periodically (typically
    once a week) to seek out and erase
                core
                 files, truncate
    administrative logfiles, nuke 'lost+found' directories, and
    otherwise clean up the
                cruft
                 that tends to pile up in the
    corners of a file system. See also
                GFR
                ,
                reaper
                ,
                skulker
                .

pseudo /soo'doh/ n. [Usenet: truncation of 'pseudonym']
    1. An electronic-mail or
                Usenet
                 persona adopted by a human for
    amusement value or as a means of avoiding negative repercussions of
    one's net.behavior; a 'nom de Usenet', often associated with
    forged postings designed to conceal message origins. Perhaps the
    best-known and funniest hoax of this type is
                B1FF
                . See also
                tentacle

                          . 2. Notionally, a
                  flamage
                  -generating AI program
   simulating a Usenet user. Many flamers have been accused of
   actually being such entities, despite the fact that no AI program
   of the required sophistication yet exists. However, in 1989 there
   was a famous series of forged postings that used a
   phrase-frequency-based travesty generator to simulate the styles of
   several well-known flamers; it was based on large samples of their
   back postings (compare
                  Dissociated Press
). A significant
   number of people were fooled by the forgeries, and the debate over
   their authenticity was settled only when the perpetrator came
   forward to publicly admit the hoax.

pseudoprime n. A backgammon prime (six consecutive occupied
   points) with one point missing. This term is an esoteric pun
   derived from a mathematical method that, rather than determining
   precisely whether a number is prime (has no divisors), uses a
   statistical technique to decide whether the number is 'probably'
   prime. A number that passes this test was, before about 1985,
   called a 'pseudoprime' (the terminology used by number theorists
   has since changed slightly; pre-1985 pseudoprimes are now
   'probable primes' and 'pseudoprime' has a more restricted meaning
   in modular arithmetic). The hacker backgammon usage stemmed from
   the idea that a pseudoprime is almost as good as a prime: it does
   the job of a prime until proven otherwise, and that probably won't
   happen.

pseudosuit n. /soo'doh-s[y]oot'/ A
                  suit
                   wannabee; a
   hacker who has decided that he wants to be in management or
   administration and begins wearing ties, sport coats, and (shudder!)
   suits voluntarily. It's his funeral. See also
                  lobotomy
                  .

psychedelicware /si:'k*-del'-ik-weir/ n. [UK] Syn.

                  display hack
                  . See also
                  smoking clover
                  .

psyton /si:'ton/ n. [TMRC] The elementary particle carrying the
   sinister force. The probability of a process losing is
   proportional to the number of psytons falling on it. Psytons are
   generated by observers, which is why demos are more likely to fail
   when lots of people are watching. [This term appears to have been
   largely superseded by
                  bogon
                  ; see also
                  quantum bogodynamics
                  .
   -- ESR]

pubic directory n.   [NYU] (also 'pube directory' /pyoob'
   d*-rek't*-ree/) The 'pub' (public) directory on a machine that
   allows
                  FTP
                   access. So called because it is the default
   location for
                  SEX
                   (sense 1). "I'll have the source in the
   pube directory by Friday."

puff vt. To decompress data that has been crunched by
   Huffman coding. At least one widely distributed Huffman decoder
   program was actually *named* 'PUFF', but these days it is
   usually packaged with the encoder. Oppose
                  huff
                  .

punched card n.obs. [techspeak] (alt. 'punch card') The
   signature medium of computing's
                  Stone Age
                  , now obsolescent
   outside of some IBM shops. The punched card actually predated
   computers considerably, originating in 1801 as a control device for
   mechanical looms. The version patented by Hollerith and used with
   mechanical tabulating machines in the 1890 U.S. Census was a piece
   of cardboard about 90 mm by 215 mm. There is a widespread myth
   that it was designed to fit in the currency trays used for that
   era's larger dollar bills, but recent investigations have falsified
   this.

   IBM (which originated as a tabulating-machine manufacturer) married
   the punched card to computers, encoding binary information as
   patterns of small rectangular holes; one character per column,
   80 columns per card. Other coding schemes, sizes of card, and
   hole shapes were tried at various times.

   The 80-column width of most character terminals is a legacy of the
   IBM punched card; so is the size of the quick-reference cards
   distributed with many varieties of computers even today. See

                  chad
                  ,
                  chad box
                  ,
                  eighty-column mind
                  ,
                  green card
                  ,

                  dusty deck
                  ,
                  lace card
                  ,
                  card walloper
                  .

punt v. [from the punch line of an old joke referring to
   American football: "Drop back 15 yards and punt!"] 1. To give up,
   typically without any intention of retrying. "Let's punt the
   movie tonight." "I was going to hack all night to get this
   feature in, but I decided to punt" may mean that you've decided
   not to stay up all night, and may also mean you're not ever even
   going to put in the feature. 2. More specifically, to give up on
   figuring out what the
                 Right Thing
                  is and resort to an
   inefficient hack. 3. A design decision to defer solving a problem,
   typically because one cannot define what is desirable sufficiently
   well to frame an algorithmic solution. "No way to know what the
   right form to dump the graph in is -- we'll punt that for now."
   4. To hand a tricky implementation problem off to some other
   section of the design. "It's too hard to get the compiler to do
   that; let's punt to the runtime system."

Purple Book n. 1. The "System V Interface Definition".
   The covers of the first editions were an amazingly nauseating shade
   of off-lavender. 2. Syn.
                 Wizard Book
                 . Donald Lewine's
   "POSIX Programmer's Guide" (O'Reilly, 1991, ISBN
   0-937175-73-0). See also
                 book titles
                 .

purple wire n. [IBM] Wire installed by Field Engineers to work
   around problems discovered during testing or debugging. These are
   called 'purple wires' even when (as is frequently the case) their
   actual physical color is yellow.... Compare
                 blue wire
                 ,

                 yellow wire
                 , and
                 red wire
                 .

push [from the operation that puts the current information
   on a stack, and the fact that procedure return addresses are saved
   on a stack] (Also PUSH /push/ or PUSHJ /push'J/, the latter
   based on the PDP-10 procedure call instruction.) 1. To put
   something onto a
                 stack
                  or
                 pdl
                 . If one says that
   something has been pushed onto one's stack, it means that the
   Damoclean list of things hanging over ones's head has grown longer
   and heavier yet. This may also imply that one will deal with it
   before other pending items; otherwise one might say that the
   thing was 'added to my queue'. 2. vi. To enter upon a
   digression, to save the current discussion for later. Antonym of

                 pop

```
                  ; see also
                  stack
                  ,
                  pdl
                  .
```

1.22 Q

```
                  quad n.  1. Two bits; syn. for
                  quarter
                  ,
                  crumb
                  ,

                  tayste
                  . 2. A four-pack of anything (compare
                  hex
                  , sense
   2).  3. The rectangle or box glyph used in the APL language for
   various arcane purposes mostly related to I/O.  Former
   Ivy-Leaguers and Oxford types are said to associate it with
   nostalgic memories of dear old University.

quadruple bucky n.,obs.  1. On an MIT
                  space-cadet keyboard
                  ,
   use of all four of the shifting keys (control, meta,
   hyper, and super) while typing a character key.  2. On a Stanford
   or MIT keyboard in
                  raw mode
                  , use of four shift keys while
   typing a fifth character, where the four shift keys are the control
   and meta keys on *both* sides of the keyboard.  This was very
   difficult to do!  One accepted technique was to press the
   left-control and left-meta keys with your left hand, the
   right-control and right-meta keys with your right hand, and the
   fifth key with your nose.

   Quadruple-bucky combinations were very seldom used in practice,
   because when one invented a new command one usually assigned it to
   some character that was easier to type.  If you want to imply that
   a program has ridiculously many commands or features, you can say
   something like: "Oh, the command that makes it spin the tapes
   while whistling Beethoven's Fifth Symphony is
   quadruple-bucky-cokebottle."  See
                  double bucky
                  ,
                  bucky bits
                  ,
                  cokebottle
                  .

quantifiers  In techspeak and jargon, the standard metric
```

prefixes used in the SI (Syst`eme International) conventions for
scientific measurement have dual uses. With units of time or
things that come in powers of 10, such as money, they retain their
usual meanings of multiplication by powers of 1000 = 10^3.
But when used with bytes or other things that naturally come in
powers of 2, they usually denote multiplication by powers of
1024 = 2^(10).

Here are the SI magnifying prefixes, along with the corresponding
binary interpretations in common use:

```
  prefix  decimal  binary
  kilo-   1000^1   1024^1 = 2^10 = 1,024
  mega-   1000^2   1024^2 = 2^20 = 1,048,576
  giga-   1000^3   1024^3 = 2^30 = 1,073,741,824
  tera-   1000^4   1024^4 = 2^40 = 1,099,511,627,776
  peta-   1000^5   1024^5 = 2^50 = 1,125,899,906,842,624
  exa-    1000^6   1024^6 = 2^60 = 1,152,921,504,606,846,976
  zetta-  1000^7   1024^7 = 2^70 = 1,180,591,620,717,411,303,424
  yotta-  1000^8   1024^8 = 2^80 = 1,208,925,819,614,629,174,706,176
```

Here are the SI fractional prefixes:

```
  *prefix  decimal      jargon usage*
  milli-  1000^-1      (seldom used in jargon)
  micro-  1000^-2      small or human-scale (see
              micro-
              )
  nano-   1000^-3      even smaller (see
              nano-
              )
  pico-   1000^-4      even smaller yet (see
              pico-
              )
  femto-  1000^-5      (not used in jargon--yet)
  atto-   1000^-6      (not used in jargon--yet)
  zepto-  1000^-7      (not used in jargon--yet)
  yocto-  1000^-8      (not used in jargon--yet)
```

The prefixes zetta-, yotta-, zepto-, and yocto- have been included
in these tables purely for completeness and giggle value; they were
adopted in 1990 by the `19th Conference Generale des Poids et
Mesures'. The binary peta- and exa- loadings, though well
established, are not in jargon use either -- yet. The prefix
milli-, denoting multiplication by 1000^(-1), has always
been rare in jargon (there is, however, a standard joke about the
`millihelen' -- notionally, the amount of beauty required to
launch one ship). See the entries on
              micro-
              ,
              pico-
              , and

              nano-
               for more information on connotative jargon use of these
terms. `Femto' and `atto' (which, interestingly, derive not
from Greek but from Danish) have not yet acquired jargon loadings,

though it is easy to predict what those will be once computing
technology enters the required realms of magnitude (however, see

                attoparsec
).

There are, of course, some standard unit prefixes for powers of
10. In the following table, the 'prefix' column is the
international standard suffix for the appropriate power of ten; the
'binary' column lists jargon abbreviations and words for the
corresponding power of 2. The B-suffixed forms are commonly used
for byte quantities; the words 'meg' and 'gig' are nouns that may
(but do not always) pluralize with 's'.

prefix	decimal	binary	pronunciation
kilo-	k	K, KB,	/kay/
mega-	M	M, MB, meg	/meg/
giga-	G	G, GB, gig	/gig/,/jig/

Confusingly, hackers often use K or M as though they were suffix or
numeric multipliers rather than a prefix; thus "2K dollars", "2M
of disk space". This is also true (though less commonly) of G.

Note that the formal SI metric prefix for 1000 is 'k'; some use
this strictly, reserving 'K' for multiplication by 1024 (KB is
thus 'kilobytes').

K, M, and G used alone refer to quantities of bytes; thus, 64G is
64 gigabytes and 'a K' is a kilobyte (compare mainstream use of
'a G' as short for 'a grand', that is, $1000). Whether one
pronounces 'gig' with hard or soft 'g' depends on what one thinks
the proper pronunciation of 'giga-' is.

Confusing 1000 and 1024 (or other powers of 2 and 10 close in
magnitude) -- for example, describing a memory in units of
500K or 524K instead of 512K -- is a sure sign of the

                marketroid
                . One example of this: it is common to refer to the
capacity of 3.5"
                microfloppies
                 as '1.44 MB' In fact, this is a
completely
                bogus
                number. The correct size is 1440 KB, that
is, 1440 * 1024 = 1474560 bytes. So the 'mega' in '1.44 MB' is
compounded of two 'kilos', one of which is 1024 and the other of
which is 1000. The correct number of megabytes would of course be
1440 / 1024 = 1.40625. Alas, this fine point is probably lost on
the world forever.

[1993 update: hacker Morgan Burke has proposed, to general
approval on Usenet, the following additional prefixes:

groucho
     $10^{(-30)}$
harpo

```
     10^(-27)
harpi
     10^(27)
grouchi
     10^(30)
```

   We observe that this would leave the prefixes zeppo-, gummo-, and
   chico- available for future expansion. Sadly, there is little
   immediate prospect that Mr. Burke's eminently sensible proposal
   will be ratified.]

quantum bogodynamics /kwon'tm boh`goh-di:-nam'iks/ n. A
   theory that characterizes the universe in terms of bogon sources
   (such as politicians, used-car salesmen, TV evangelists, and

               suit
               s in general), bogon sinks (such as taxpayers and
   computers), and bogosity potential fields. Bogon absorption, of
   course, causes human beings to behave mindlessly and machines to
   fail (and may also cause both to emit secondary bogons); however,
   the precise mechanics of the bogon-computron interaction are not
   yet understood and remain to be elucidated. Quantum bogodynamics
   is most often invoked to explain the sharp increase in hardware and
   software failures in the presence of suits; the latter emit bogons,
   which the former absorb. See
               bogon
               ,
               computron
               ,

               suit
               ,
               psyton
               .

quarter n. Two bits. This in turn comes from the 'pieces
   of eight' famed in pirate movies -- Spanish silver crowns that
   could be broken into eight pie-slice-shaped 'bits' to make
   change. Early in American history the Spanish coin was considered
   equal to a dollar, so each of these 'bits' was considered worth
   12.5 cents. Syn.
               tayste
               ,
               crumb
               ,
               quad
               . Usage:
   rare. General discussion of such terms is under
               nybble
               .

ques /kwes/ 1. n. The question mark character ('?',
   ASCII 0111111). 2. interj. What? Also frequently verb-doubled as
   "Ques ques?" See
               wall
               .

quick-and-dirty adj. Describes a
                crock
                 put together
   under time or user pressure. Used esp. when you want to convey
   that you think the fast way might lead to trouble further down the
   road. "I can have a quick-and-dirty fix in place tonight, but
   I'll have to rewrite the whole module to solve the underlying
   design problem." See also
                kluge
                .

quine /kwi:n/ n. [from the name of the logician Willard
   van Orman Quine, via Douglas Hofstadter] A program that generates a
   copy of its own source text as its complete output. Devising the
   shortest possible quine in some given programming language is a
   common hackish amusement. Here is one classic quine:

```
((lambda (x)
  (list x (list (quote quote) x)))
 (quote
    (lambda (x)
      (list x (list (quote quote) x)))))
```

   This one works in LISP or Scheme. It's relatively easy to write
   quines in other languages such as Postscript which readily handle
   programs as data; much harder (and thus more challenging!) in
   languages like C which do not. Here is a classic C quine for ASCII
   machines:

```
char*f="char*f=%c%s%c;main()
{printf(f,34,f,34,10);}%c";
main(){printf(f,34,f,34,10);}
```

   For excruciatingly exact quinishness, remove the interior line
   breaks. Some infamous
                Obfuscated C Contest
                 entries have been
   quines that reproduced in exotic ways.

quote chapter and verse v. [by analogy with the mainstream
   phrase] To cite a relevant excerpt from an appropriate
                bible
                .
   "I don't care if 'rn' gets it wrong; 'Followup-To: poster' is
   explicitly permitted by
                RFC
                -1036. I'll quote chapter and
   verse if you don't believe me." See also
                legalese
                ,
                language lawyer
                ,
                RTFS
                 (sense 2).

quotient n. See

```
                coefficient of X
                .
```

quux /kwuhks/ n. [Mythically, from the Latin
   semi-deponent verb quuxo, quuxare, quuxandum iri; noun form
   variously 'quux' (plural 'quuces', anglicized to 'quuxes')
   and 'quuxu' (genitive plural is 'quuxuum', for four u-letters
   out of seven in all, using up all the 'u' letters in Scrabble).]
   1. Originally, a
                metasyntactic variable
                 like
                foo
                 and

                foobar
                . Invented by Guy Steele for precisely this purpose
   when he was young and naive and not yet interacting with the real
   computing community. Many people invent such words; this one seems
   simply to have been lucky enough to have spread a little. In an
   eloquent display of poetic justice, it has returned to the
   originator in the form of a nickname. 2. interj. See
                foo
                ;
   however, denotes very little disgust, and is uttered mostly for the
   sake of the sound of it. 3. Guy Steele in his persona as 'The
   Great Quux', which is somewhat infamous for light verse and for the
   'Crunchly' cartoons. 4. In some circles, used as a punning
   opposite of 'crux'. "Ah, that's the quux of the matter!"
   implies that the point is *not* crucial (compare

                tip of the ice-cube
). 5. quuxy: adj. Of or pertaining to a quux.

qux /kwuhks/ The fourth of the standard
                metasyntactic variable
                ,
   after
                baz
                 and before the quu(u...)x series.
   See
                foo
                ,
                bar
                ,
                baz
                ,
                quux
                . This appears to be a
   recent mutation from
                quux
                , and many versions (especially older
   versions) of the standard series just run
                foo
                ,
                bar
                ,
```

                 baz
                 ,
                 quux
                 , ....

QWERTY /kwer'tee/ adj.  [from the keycaps at the upper
   left] Pertaining to a standard English-language typewriter keyboard
   (sometimes called the Sholes keyboard after its inventor), as
   opposed to Dvorak or foreign-language layouts or a

                 space-cadet keyboard
                  or APL keyboard.

   Historical note: The QWERTY layout is a fine example of a
                 fossil
                 .
   It is sometimes said that it was designed to slow down the typist,
   but this is wrong; it was designed to allow *faster* typing
   -- under a constraint now long obsolete.  In early typewriters,
   fast typing using nearby type-bars jammed the mechanism.  So Sholes
   fiddled the layout to separate the letters of many common digraphs
   (he did a far from perfect job, though; 'th', 'tr', 'ed', and 'er',
   for example, each use two nearby keys).  Also, putting the letters
   of 'typewriter' on one line allowed it to be typed with particular
   speed and accuracy for
                 demo
                 s.  The jamming problem was
   essentially solved soon afterward by a suitable use of springs, but
   the keyboard layout lives on.


## 1.23   R

                 rabbit job n.  [Cambridge] A batch job that does little, if
   any, real work, but creates one or more copies of itself, breeding
   like rabbits.  Compare
                 wabbit
                 ,
                 fork bomb
                 .

rain dance n.  1. Any ceremonial action taken to correct a
   hardware problem, with the expectation that nothing will be
   accomplished.  This especially applies to reseating printed circuit
   boards, reconnecting cables, etc.  "I can't boot up the machine.
   We'll have to wait for Greg to do his rain dance."  2. Any arcane
   sequence of actions performed with computers or software in order
   to achieve some goal; the term is usually restricted to rituals
   that include both an
                 incantation
                  or two and physical activity
   or motion.  Compare
                 magic
                 ,
                 voodoo programming

                    ,
                    black art
                    ,

                    cargo cult programming
                    ,
                    wave a dead chicken
                    ; see
      also
                    casting the runes
                    .

rainbow series n.  Any of several series of technical
   manuals distinguished by cover color.  The original rainbow series
   was the NCSC security manuals (see
                    Orange Book
                    ,
                    crayola books
                    );
   the term has also been commonly applied to the PostScript
   reference set (see
                    Red Book
                    ,
                    Green Book
                    ,
                    Blue Book
                    ,

                    White Book
                    ).  Which books are meant by "'the' rainbow
   series" unqualified is thus dependent on one's local technical
   culture.

random adj.  1. Unpredictable (closest to mathematical
   definition); weird.  "The system's been behaving pretty
   randomly."  2. Assorted; undistinguished.  "Who was at the
   conference?"  "Just a bunch of random business types."
   3. (pejorative) Frivolous; unproductive; undirected.  "He's just a
   random loser."  4. Incoherent or inelegant; poorly chosen; not
   well organized.  "The program has a random set of misfeatures."
   "That's a random name for that function."  "Well, all the names
   were chosen pretty randomly."  5. In no particular order, though
   deterministic.  "The I/O channels are in a pool, and when a file
   is opened one is chosen randomly."  6. Arbitrary.  "It generates
   a random name for the scratch file."  7. Gratuitously wrong, i.e.,
   poorly done and for no good apparent reason.  For example, a
   program that handles file name defaulting in a particularly useless
   way, or an assembler routine that could easily have been coded
   using only three registers, but redundantly uses seven for values
   with non-overlapping lifetimes, so that no one else can invoke it
   without first saving four extra registers.  What
                    randomness
                    !
   8. n. A random hacker; used particularly of high-school students
   who soak up computer time and generally get in the way.  9. n.
   Anyone who is not a hacker (or, sometimes, anyone not known to the
   hacker speaking); the noun form of sense 2.  "I went to the talk,

but the audience was full of randoms asking bogus questions".
10. n. (occasional MIT usage) One who lives at Random Hall.  See
also

> J. Random
>
> ,
> some random X
>
> .

random numbers n.  When one wishes to specify a large but
random number of things, and the context is inappropriate for

> N
> , certain numbers are preferred by hacker tradition (that is,
easily recognized as placeholders).  These include the following:

  17
> Long described at MIT as 'the least random number'; see 23.
  23
> Sacred number of Eris, Goddess of Discord (along with 17 and
> 5).
  42
> The Answer to the Ultimate Question of Life, the Universe,
> and Everything. (Note that this answer is completely
> fortuitous.  ':-)')
  69
> From the sexual act.  This one was favored in MIT's ITS
> culture.
  105
> 69 hex = 105 decimal, and 69 decimal = 105 octal.
  666
> The Number of the Beast.

For further enlightenment, study the "Principia Discordia",
"

> The Hitchhiker's Guide to the Galaxy
> ", "The Joy
of Sex", and the Christian Bible (Revelation 13:18).  See also

> Discordianism
>  or consult your pineal gland.  See also
>
> for values of
>
> .

randomness n.  1. An inexplicable misfeature; gratuitous
inelegance.  2. A

> hack
>  or
> crock
>  that depends on a complex
combination of coincidences (or, possibly, the combination upon
which the crock depends for its accidental failure to malfunction).
"This hack can output characters 40--57 by putting the character
in the four-bit accumulator field of an XCT and then extracting six
bits -- the low 2 bits of the XCT opcode are the right thing."
"What randomness!"  3. Of people, synonymous with 'flakiness'.
The connotation is that the person so described is behaving

weirdly, incompetently, or inappropriately for reasons which are
(a) too tiresome to bother inquiring into, (b) are probably as
inscrutable as quantum phenomena anyway, and (c) are likely to pass
with time. "Maybe he has a real complaint, or maybe it's just
randomness.  See if he calls back."

rape vt.  1. To
              screw
               someone or something, violently;
   in particular, to destroy a program or information irrecoverably.
   Often used in describing file-system damage.  "So-and-so was
   running a program that did absolute disk I/O and ended up raping
   the master directory."  2. To strip a piece of hardware for parts.
   3. [CMU/Pitt] To mass-copy files from an anonymous ftp site.
   "Last night I raped Simtel's dskutl directory."

rare mode adj.  [Unix] CBREAK mode (character-by-character
   with interrupts enabled).  Distinguished from
              raw mode
               and

              cooked mode
              ; the phrase "a sort of half-cooked (rare?) mode"
   is used in the V7/BSD manuals to describe the mode.  Usage: rare.

raster blaster n.  [Cambridge] Specialized hardware for

              bitblt
               operations (a
              blitter
              ).  Allegedly inspired by
   'Rasta Blasta', British slang for the sort of portable stereo
   Americans call a 'boom box' or 'ghetto blaster'.

raster burn n.  Eyestrain brought on by too many hours of
   looking at low-res, poorly tuned, or glare-ridden monitors, esp.
   graphics monitors.  See
              terminal illness
              .

rat belt n.  A cable tie, esp. the sawtoothed,
   self-locking plastic kind that you can remove only by cutting (as
   opposed to a random twist of wire or a twist tie or one of those
   humongous metal clip frobs).  Small cable ties are 'mouse belts'.

rave vi.  [WPI] 1. To persist in discussing a specific
   subject.  2. To speak authoritatively on a subject about which one
   knows very little.  3. To complain to a person who is not in a
   position to correct the difficulty.  4. To purposely annoy another
   person verbally.  5. To evangelize.  See
              flame
              . 6. Also used
   to describe a less negative form of blather, such as friendly
   bullshitting.  'Rave' differs slightly from
              flame
               in that
   'rave' implies that it is the persistence or obliviousness of the

person speaking that is annoying, while
            flame
             implies somewhat
more strongly that the tone or content is offensive as well.

rave on! imp.  Sarcastic invitation to continue a
            rave
            ,
often by someone who wishes the raver would get a clue but realizes
this is unlikely.

ravs /ravz/, also 'Chinese ravs' n.  Jiao-zi (steamed or
boiled) or Guo-tie (pan-fried).  A Chinese appetizer, known
variously in the plural as dumplings, pot stickers (the literal
translation of guo-tie), and (around Boston) 'Peking Ravioli'.  The
term 'rav' is short for 'ravioli', and among hackers always
means the Chinese kind rather than the Italian kind.  Both consist
of a filling in a pasta shell, but the Chinese kind includes no
cheese, uses a thinner pasta, has a pork-vegetable filling (good
ones include Chinese chives), and is cooked differently, either by
steaming or frying.  A rav or dumpling can be cooked any way, but a
potsticker is always the fried kind (so called because it sticks to
the frying pot and has to be scraped off).  "Let's get
hot-and-sour soup and three orders of ravs."  See also

            oriental food
            .

raw mode n.  A mode that allows a program to transfer bits
directly to or from an I/O device (or, under
            bogus
             systems
that make a distinction, a disk file) without any processing,
abstraction, or interpretation by the operating system.  Compare

            rare mode
            ,
            cooked mode
            .  This is techspeak under Unix,
jargon elsewhere.

rc file /R-C fi:l/ n.  [Unix: from 'runcom files' on
the
            CTSS
             system ca.1955, via the startup script
'/etc/rc'] Script file containing startup instructions for an
application program (or an entire operating system), usually a text
file containing commands of the sort that might have been invoked
manually once the system was running but are to be executed
automatically each time the system starts up.  See also
            dot file
            ,

            profile
             (sense 1).

RE /R-E/ n.  Common spoken and written shorthand for

                        regexp
                        .

read-only user n.  Describes a
                luser
                 who uses computers
   almost exclusively for reading Usenet, bulletin boards, and/or
   email, rather than writing code or purveying useful information.
   See
                twink
                ,
                terminal junkie
                ,
                lurker
                .

README file n.  Hacker's-eye introduction traditionally
   included in the top-level directory of a Unix source distribution,
   containing a pointer to more detailed documentation, credits,
   miscellaneous revision history, notes, etc.  (The file may be named
   README, or READ.ME, or rarely ReadMe or readme.txt or some other
   variant.)  In the Mac and PC worlds, software is not usually
   distributed in source form, and the README is more likely to
   contain user-oriented material like last-minute documentation
   changes, error workarounds, and restrictions.  When asked, hackers
   invariably relate the README convention to the famous scene in
   Lewis Carroll's "Alice's Adventures In Wonderland" in which
   Alice confronts magic munchies labeled "Eat Me" and "Drink Me".

real adj.  Not simulated.  Often used as a specific antonym
   to
                virtual
                 in any of its jargon senses.

real estate n.  May be used for any critical resource
   measured in units of area.  Most frequently used of 'chip real
   estate', the area available for logic on the surface of an
   integrated circuit (see also
                nanoacre
                ).  May also be used of
   floor space in a
                dinosaur pen
                , or even space on a crowded
   desktop (whether physical or electronic).

real hack n.  A
                crock
                .  This is sometimes used
   affectionately; see
                hack
                .

real operating system n.  The sort the speaker is used to.
   People from the BSDophilic academic community are likely to issue
   comments like "System V?  Why don't you use a *real*
   operating system?", people from the commercial/industrial Unix

sector are known to complain "BSD?  Why don't you use a
*real* operating system?", and people from IBM object
"Unix?  Why don't you use a *real* operating system?"  Only

    MS-DOS
     is universally considered unreal.  See
    holy wars
    ,

    religious issues
    ,
    proprietary
    ,
    Get a real computer!
    Real Programmer n.   [indirectly, from the book
"Real Men Don't Eat Quiche"] A particular sub-variety of
hacker: one possessed of a flippant attitude toward complexity that
is arrogant even when justified by experience.  The archetypal
'Real Programmer' likes to program on the
    bare metal
     and is
very good at same, remembers the binary opcodes for every machine
he has ever programmed, thinks that HLLs are sissy, and uses a
debugger to edit his code because full-screen editors are for
wimps.  Real Programmers aren't satisfied with code that hasn't
been
    bum
    med into a state of
    tense
    ness just short of
rupture.  Real Programmers never use comments or write
documentation: "If it was hard to write", says the Real
Programmer, "it should be hard to understand."  Real Programmers
can make machines do things that were never in their spec sheets;
in fact, they are seldom really happy unless doing so.  A Real
Programmer's code can awe with its fiendish brilliance, even as its
crockishness appalls.  Real Programmers live on junk food and
coffee, hang line-printer art on their walls, and terrify the crap
out of other programmers -- because someday, somebody else might
have to try to understand their code in order to change it.  Their
successors generally consider it a
    Good Thing
     that there
aren't many Real Programmers around any more.  For a famous (and
somewhat more positive) portrait of a Real Programmer, see
"
    The Story of Mel, a Real Programmer
    " in Appendix A.
The term itself was popularized by a 1983 Datamation article
"Real Programmers Don't Use Pascal" by Ed Post, still
circulating on Usenet and Internet in on-line form.

Real Soon Now adv.  [orig. from SF's fanzine community,
popularized by Jerry Pournelle's column in "BYTE"] 1. Supposed
to be available (or fixed, or cheap, or whatever) real soon now
according to somebody, but the speaker is quite skeptical.  2. When
one's gods, fates, or other time commitments permit one to get to

it (in other words, don't hold your breath).  Often abbreviated
RSN.  Compare
                copious free time
                .


real time  1. [techspeak] adj. Describes an application
   which requires a program to respond to stimuli within some small
   upper limit of response time (typically milli- or microseconds).
   Process control at a chemical plant is the classic example.  Such
   applications often require special operating systems (because
   everything else must take a back seat to response time) and
   speed-tuned hardware.  2. adv. In jargon, refers to doing something
   while people are watching or waiting.  "I asked her how to find
   the calling procedure's program counter on the stack and she came
   up with an algorithm in real time."

real user n.  1. A commercial user.  One who is paying
   *real* money for his computer usage.  2. A non-hacker.
   Someone using the system for an explicit purpose (a research
   project, a course, etc.)  other than pure exploration.  See

                user
                .  Hackers who are also students may also be real users.
   "I need this fixed so I can do a problem set.  I'm not complaining
   out of randomness, but as a real user."  See also
                luser
                .

Real World n.  1. Those institutions at which
   'programming' may be used in the same sentence as 'FORTRAN',
   '
                COBOL
                ', 'RPG', '
                IBM
                ', 'DBASE', etc.  Places where
   programs do such commercially necessary but intellectually
   uninspiring things as generating payroll checks and invoices.
   2. The location of non-programmers and activities not related to
   programming.  3. A bizarre dimension in which the standard dress is
   shirt and tie and in which a person's working hours are defined as
   9 to 5 (see
                code grinder
                ).  4. Anywhere outside a university.
   "Poor fellow, he's left MIT and gone into the Real World."  Used
   pejoratively by those not in residence there.  In conversation,
   talking of someone who has entered the Real World is not unlike
   speaking of a deceased person.  It is also noteworthy that on the
   campus of Cambridge University in England, there is a gaily-painted
   lamp-post which bears the label 'REALITY CHECKPOINT'.  It marks the
   boundary between university and the Real World; check your notions
   of reality before passing.  This joke is funnier because the
   Cambridge 'campus' is actually coextensive with the center of
   Cambridge town.  See also
                fear and loathing
                ,
                mundane
                , and

                    uninteresting
                    .

reality check n.  1. The simplest kind of test of software
    or hardware; doing the equivalent of asking it what 2 + 2 is
    and seeing if you get 4.  The software equivalent of a
                    smoke test
                    .
    software.  Compare
                    sanity check
                    .

reaper n.  A
                    prowler
                     that
                    GFR
                    s files.  A file
    removed in this way is said to have been 'reaped'.

rectangle slinger n.  See
                    polygon pusher
                    .

recursion n.  See
                    recursion
                    .  See also
                    tail recursion
                    .

recursive acronym n.  A hackish (and especially MIT)
    tradition is to choose acronyms/abbreviations that refer humorously
    to themselves or to other acronyms/abbreviations.  The classic
    examples were two MIT editors called EINE ("EINE Is Not EMACS")
    and ZWEI ("ZWEI Was EINE Initially").  More recently, there is a
    Scheme compiler called LIAR (Liar Imitates Apply Recursively), and

                    GNU
                     (q.v., sense 1) stands for "GNU's Not Unix!" -- and a
    company with the name CYGNUS, which expands to "Cygnus, Your GNU
    Support".  See also
                    mung
                    ,
                    EMACS
                    .

Red Book n.  1. Informal name for one of the three standard
    references on
                    PostScript
                     ("PostScript Language Reference
    Manual", Adobe Systems (Addison-Wesley, 1985; QA76.73.P67P67; ISBN
    0-201-10174-2, or the 1990 second edition ISBN 0-201-18127-4); the
    others are known as the
                    Green Book
                    , the
                    Blue Book
                    , and

the
                White Book
                 (sense 2).  2. Informal name for one of the 3
    standard references on Smalltalk ("Smalltalk-80: The
    Interactive Programming Environment" by Adele Goldberg
    (Addison-Wesley, 1984; QA76.8.S635G638; ISBN 0-201-11372-4); this
    too is associated with blue and green books).  3. Any of the 1984
    standards issued by the CCITT eighth plenary assembly.  These
    include, among other things, the X.400 email spec and the Group 1
    through 4 fax standards.  4. The new version of the
                Green Book
                   (sense 4) -- IEEE 1003.1-1990, a.k.a ISO 9945-1 -- is (because  ←
                       of
    the color and the fact that it is printed on A4 paper) known in the
    U.S.A. as "the Ugly Red Book That Won't Fit On The Shelf" and in
    Europe as "the Ugly Red Book That's A Sensible Size".  5. The NSA
    "Trusted Network Interpretation" companion to the
                Orange Book
                .
    See also
                book titles
                .

red wire n.  [IBM] Patch wires installed by programmers who have
    no business mucking with the hardware.  It is said that the only
    thing more dangerous than a hardware guy with a code patch is a

                softy
                 with a soldering iron....  Compare
                blue wire
                ,

                yellow wire
                ,
                purple wire
                .

regexp /reg'eksp/ n.  [Unix] (alt. 'regex' or 'reg-ex')
    1. Common written and spoken abbreviation for 'regular
    expression', one of the wildcard patterns used, e.g., by Unix
    utilities such as 'grep(1)', 'sed(1)', and 'awk(1)'.
    These use conventions similar to but more elaborate than those
    described under
                glob
                . For purposes of this lexicon, it is
    sufficient to note that regexps also allow complemented character
    sets using '^'; thus, one can specify 'any non-alphabetic
    character' with '[^A-Za-z]'.  2. Name of a well-known PD
    regexp-handling package in portable C, written by revered Usenetter
    Henry Spencer <henry@zoo.toronto.edu>.

register dancing n.  Many older processor architectures
    suffer from a serious shortage of general-purpose registers.  This
    is especially a problem for compiler-writers, because their
    generated code needs places to store temporaries for things like
    intermediate values in expression evaluation.  Some designs with
    this problem, like the Intel 80x86, do have a handful of

special-purpose registers that can be pressed into service,
providing suitable care is taken to avoid unpleasant side effects
on the state of the processor: while the special-purpose register
is being used to hold an intermediate value, a delicate minuet is
required in which the previous value of the register is saved and
then restored just before the official function (and value) of the
special-purpose register is again needed.

reincarnation, cycle of n.  See
                cycle of reincarnation
                .

reinvent the wheel v.  To design or implement a tool
    equivalent to an existing one or part of one, with the implication
    that doing so is silly or a waste of time.  This is often a valid
    criticism.  On the other hand, automobiles don't use wooden
    rollers, and some kinds of wheel have to be reinvented many times
    before you get them right.  On the third hand, people reinventing
    the wheel do tend to come up with the moral equivalent of a
    trapezoid with an offset axle.

religion of CHI /ki:/ n.   [Case Western Reserve
    University] Yet another hackish parody religion (see also

                Church of the SubGenius
                ,
                Discordianism
                ).  In the mid-70s,
    the canonical "Introduction to Programming" courses at CWRU were
    taught in Algol, and student exercises were punched on cards and
    run on a Univac 1108 system using a homebrew operating system named
    CHI.  The religion had no doctrines and but one ritual: whenever
    the worshipper noted that a digital clock read 11:08, he or she
    would recite the phrase "It is 11:08; ABS, ALPHABETIC, ARCSIN,
    ARCCOS, ARCTAN."  The last five words were the first five
    functions in the appropriate chapter of the Algol manual; note the
    special pronunciations /obz/ and /ark'sin/ rather than the more
    common /ahbz/ and /ark'si:n/.  Using an alarm clock to warn of
    11:08's arrival was
                considered harmful
                .

religious issues n.  Questions which seemingly cannot be
    raised without touching off
                holy wars
                , such as "What is the
    best operating system (or editor, language, architecture, shell,
    mail reader, news reader)?", "What about that Heinlein guy,
    eh?", "What should we add to the new Jargon File?"  See

                holy wars
                ; see also
                theology
                ,
                bigot
                .

    This term is a prime example of
                ha ha only serious
                . People
    actually develop the most amazing and religiously intense
    attachments to their tools, even when the tools are intangible.
    The most constructive thing one can do when one stumbles into the
    crossfire is mumble
                Get a life!
                and leave -- unless, of course,
    one's *own* unassailably rational and obviously correct
    choices are being slammed.

replicator n.  Any construct that acts to produce copies of
    itself; this could be a living organism, an idea (see
                meme
                ), a
    program (see
                quine
                ,
                worm
                ,
                wabbit
                ,
                fork bomb
                ,
    and
                virus
                ), a pattern in a cellular automaton (see
                life
                ,
    sense 1), or (speculatively) a robot or
                nanobot
                .  It is even
    claimed by some that
                Unix
                 and
                C
                 are the symbiotic halves
    of an extremely successful replicator; see
                Unix conspiracy
                .

reply n.  See
                followup
                .

restriction n.  A
                bug
                 or design error that limits a
    program's capabilities, and which is sufficiently egregious that
    nobody can quite work up enough nerve to describe it as a

                feature
                .  Often used (esp. by
                marketroid
                 types) to make
    it sound as though some crippling bogosity had been intended by the

designers all along, or was forced upon them by arcane technical
constraints of a nature no mere user could possibly comprehend
(these claims are almost invariably false).

Old-time hacker Joseph M. Newcomer advises that whenever choosing a
quantifiable but arbitrary restriction, you should make it either a
power of 2 or a power of 2 minus 1.  If you impose a limit of
17 items in a list, everyone will know it is a random number -- on
the other hand, a limit of 15 or 16 suggests some deep reason
(involving 0- or 1-based indexing in binary) and you will get less

          flamage
           for it.  Limits which are round numbers in base 10 are
always especially suspect.

retcon /ret'kon/  [short for 'retroactive continuity',
   from the Usenet newsgroup rec.arts.comics] 1. n. The common
   situation in pulp fiction (esp. comics or soap operas) where a
   new story 'reveals' things about events in previous stories,
   usually leaving the 'facts' the same (thus preserving
   continuity) while completely changing their interpretation.  For
   example, revealing that a whole season of "Dallas" was a
   dream was a retcon.  2. vt. To write such a story about a character
   or fictitious object.  "Byrne has retconned Superman's cape so
   that it is no longer unbreakable."  "Marvelman's old adventures
   were retconned into synthetic dreams."  "Swamp Thing was
   retconned from a transformed person into a sentient vegetable."
   "Darth Vader was retconned into Luke Skywalker's father in
   "The Empire Strikes Back".

   [This term is included because it is a good example of hackish
   linguistic innovation in a field completely unrelated to computers.
   The word 'retcon' will probably spread through comics fandom and
   lose its association with hackerdom within a couple of years; for
   the record, it started here. -- ESR]

   [1993 update: some comics fans on the net now claim that retcon was
   independently in use in comics fandom before rec.arts.comics.
   In lexicography, nothing is ever simple. -- ESR]

RETI v.  Syn.
          RTI
          retrocomputing /ret'-roh-k*m-pyoo'ting/ n.  Refers to
   emulations of way-behind-the-state-of-the-art hardware or software,
   or implementations of never-was-state-of-the-art; esp. if such
   implementations are elaborate practical jokes and/or parodies,
   written mostly for
          hack value
          , of more 'serious' designs.
   Perhaps the most widely distributed retrocomputing utility was the
   'pnch(6)' or 'bcd(6)' program on V7 and other early Unix
   versions, which would accept up to 80 characters of text argument
   and display the corresponding pattern in
          punched card
           code.
   Other well-known retrocomputing hacks have included the programming
   language

```
                INTERCAL
                , a
                JCL
                -emulating shell for Unix, the
     card-punch-emulating editor named 029, and various elaborate PDP-11
     hardware emulators and RT-11 OS emulators written just to keep an
     old, sourceless
                Zork
                 binary running.
```

return from the dead v. To regain access to the net after a
    long absence. Compare
                person of no account
                .

RFC /R-F-C/ n. [Request For Comment] One of a
    long-established series of numbered Internet informational
    documents and standards widely followed by commercial software and
    freeware in the Internet and Unix communities. Perhaps the single
    most influential one has been RFC-822 (the Internet mail-format
    standard). The RFCs are unusual in that they are floated by
    technical experts acting on their own initiative and reviewed by
    the Internet at large, rather than formally promulgated through an
    institution such as ANSI. For this reason, they remain known as
    RFCs even once adopted as standards.

    The RFC tradition of pragmatic, experience-driven, after-the-fact
    standard writing done by individuals or small working groups has
    important advantages over the more formal, committee-driven process
    typical of ANSI or ISO. Emblematic of some of these advantages is
    the existence of a flourishing tradition of 'joke' RFCs; usually
    at least one a year is published, usually on April 1st. Well-known
    joke RFCs have included 527 ("ARPAWOCKY", R. Merryman, UCSD; 22
    June 1973), 748 ("Telnet Randomly-Lose Option", Mark R. Crispin;
    1 April 1978), and 1149 ("A Standard for the Transmission of IP
    Datagrams on Avian Carriers", D. Waitzman, BBN STC; 1 April
    1990). The first was a Lewis Carroll pastiche; the second a parody
    of the TCP-IP documentation style, and the third a deadpan
    skewering of standards-document legalese, describing protocols for
    transmitting Internet data packets by carrier pigeon.

    The RFCs are most remarkable for how well they work -- they manage
    to have neither the ambiguities that are usually rife in informal
    specifications, nor the committee-perpetrated misfeatures that
    often haunt formal standards, and they define a network that has
    grown to truly worldwide proportions.

RFE /R-F-E/ n. 1. [techspeak] Request For Enhancement
    (compare
                RFC
). 2. [from 'Radio Free Europe', Bellcore and
    Sun] Radio Free Ethernet, a system (originated by Peter Langston)
    for broadcasting audio among Sun SPARCstations over the ethernet.

rib site n. [by analogy with
                backbone site
                ] A machine

```
    that has an on-demand high-speed link to a
              backbone site
               and
    serves as a regional distribution point for lots of third-party
    traffic in email and Usenet news.  Compare
              leaf site
              ,

              backbone site
              .
```

rice box n. [from ham radio slang] Any Asian-made commodity
   computer, esp. an 80x86-based machine built to IBM PC-compatible
   ISA or EISA-bus standards.

Right Thing n. That which is *compellingly* the
   correct or appropriate thing to use, do, say, etc. Often
   capitalized, always emphasized in speech as though capitalized.
   Use of this term often implies that in fact reasonable people may
   disagree. "What's the right thing for LISP to do when it sees
   '(mod a 0)'? Should it return 'a', or give a divide-by-0
   error?" Oppose
              Wrong Thing
              .

RL // n. [MUD community] Real Life. "Firiss laughs in
   RL" means that Firiss's player is laughing. Oppose
              VR
              .

roach vt. [Bell Labs] To destroy, esp. of a data
   structure. Hardware gets
              toast
              ed or
              fried
              , software gets
   roached.

robot n. [IRC, MUD] An
              IRC
               or
              MUD
               user who is
   actually a program. On IRC, typically the robot provides some
   useful service. Examples are NickServ, which tries to prevent
   random users from adopting
              nick
              s already claimed by others,
   and MsgServ, which allows one to send asynchronous messages to be
   delivered when the recipient signs on. Also common are
   'annoybots', such as KissServ, which perform no useful function
   except to send cute messages to other people. Service robots are
   less common on MUDs; but some others, such as the 'Julia' robot
   active in 1990--91, have been remarkably impressive Turing-test
   experiments, able to pass as human for as long as ten or fifteen
   minutes of conversation.

robust adj. Said of a system that has demonstrated an
   ability to recover gracefully from the whole range of exceptional
   inputs and situations in a given environment. One step below

             bulletproof
             . Carries the additional connotation of elegance
   in addition to just careful attention to detail. Compare

             smart
             , oppose
             brittle
             .

rococo adj. Terminally
             baroque
             . Used to imply that a
   program has become so encrusted with the software equivalent of
   gold leaf and curlicues that they have completely swamped the
   underlying design. Called after the later and more extreme forms
   of Baroque architecture and decoration prevalent during the
   mid-1700s in Europe. Alan Perlis said: "Every program eventually
   becomes rococo, and then rubble." Compare
             critical mass
             .

rogue n. [Unix] A Dungeons-and-Dragons-like game using character
   graphics, written under BSD Unix and subsequently ported to other
   Unix systems. The original BSD 'curses(3)' screen-handling
   package was hacked together by Ken Arnold to support
   'rogue(6)' and has since become one of Unix's most important
   and heavily used application libraries. Nethack, Omega, Larn, and
   an entire subgenre of computer dungeon games all took off from the
   inspiration provided by 'rogue(6)'. See also
             nethack
             .

room-temperature IQ quant. [IBM] 80 or below (nominal room
   temperature is 72 degrees Fahrenheit, 22 degrees Celsius). Used in
   describing the expected intelligence range of the
             luser
             .
   "Well, but how's this interface going to play with the
   room-temperature IQ crowd?" See
             drool-proof paper
             . This is
   a much more insulting phrase in countries that use Celsius
   thermometers.

root n. [Unix] 1. The
             superuser
              account (with user name
   'root') that ignores permission bits, user number 0 on a Unix
   system. The term
             avatar
              is also used. 2. The top node of the
   system directory structure (home directory of the root user).
   3. By extension, the privileged system-maintenance login on any

    OS. See

                root mode
                ,
                go root
                , see also
                wheel
                .

root mode n. Syn. with
                wizard mode
                 or 'wheel mode'.
    Like these, it is often generalized to describe privileged states
    in systems other than OSes.

rot13 /rot ther'teen/ n.,v. [Usenet: from 'rotate
    alphabet 13 places'] The simple Caesar-cypher encryption that
    replaces each English letter with the one 13 places forward or back
    along the alphabet, so that "The butler did it!" becomes "Gur
    ohgyre qvq vg!" Most Usenet news reading and posting programs
    include a rot13 feature. It is used to enclose the text in a
    sealed wrapper that the reader must choose to open -- e.g., for
    posting things that might offend some readers, or
                spoiler
                s. A
    major advantage of rot13 over rot(N) for other N is
    that it is self-inverse, so the same code can be used for encoding
    and decoding.

rotary debugger n. [Commodore] Essential equipment for
    those late-night or early-morning debugging sessions. Mainly used
    as sustenance for the hacker. Comes in many decorator colors, such
    as Sausage, Pepperoni, and Garbage. See
                pizza, ANSI standard
                .

round tape n. Industry-standard 1/2-inch magnetic tape (7-
    or 9-track) on traditional circular reels. See
                macrotape
                ,
    oppose
                square tape
                .

RSN /R-S-N/ adj. See
                Real Soon Now
                .

RTBM /R-T-B-M/ imp. [Unix] Commonwealth Hackish variant
    of
                RTFM
                ; expands to 'Read The Bloody Manual'. RTBM is often
    the entire text of the first reply to a question from a

                newbie
                ; the *second* would escalate to "RTFM".

RTFAQ /R-T-F-A-Q/ imp. [Usenet: primarily written, by

    analogy with
                RTFM
                ] Abbrev. for 'Read the FAQ!', an
    exhortation that the person addressed ought to read the newsgroup's

                FAQ list
                 before posting questions.

RTFB /R-T-F-B/ imp.   [Unix] Acronym for 'Read The Fucking
    Binary'. Used when neither documentation nor source for the
    problem at hand exists, and the only thing to do is use some
    debugger or monitor and directly analyze the assembler or even the
    machine code. "No source for the buggy port driver? Aaargh! I
    hate proprietary operating systems. Time to RTFB."

    Of the various RTF? forms, 'RTFB' is the least pejorative against
    anyone asking a question for which RTFB is the answer; the anger
    here is directed at the absence of both source *and* adequate
    documentation.

RTFM /R-T-F-M/ imp.   [Unix] Acronym for 'Read The Fucking
    Manual'. 1. Used by
                guru
                s to brush off questions they
    consider trivial or annoying. Compare
                Don't do that, then!
                .
    2. Used when reporting a problem to indicate that you aren't just
    asking out of
                randomness
                . "No, I can't figure out how to
    interface Unix to my toaster, and yes, I have RTFM." Unlike
    sense 1, this use is considered polite. See also
                FM
                ,

                RTFAQ
                ,
                RTFB
                ,
                RTFS
                ,
                RTM
                , all of which mutated
    from RTFM, and compare
                UTSL
                .

RTFS /R-T-F-S/ [Unix] 1. imp. Acronym for 'Read The
    Fucking Source'. Variant form of
                RTFM
                , used when the problem
    at hand is not necessarily obvious and not answerable from the
    manuals -- or the manuals are not yet written and maybe never will
    be. For even trickier situations, see
                RTFB
                . Unlike RTFM, the

anger inherent in RTFS is not usually directed at the person asking
the question, but rather at the people who failed to provide
adequate documentation. 2. imp. 'Read The Fucking Standard'; this
oath can only be used when the problem area (e.g., a language or
operating system interface) has actually been codified in a
ratified standards document. The existence of these standards
documents (and the technically inappropriate but politically
mandated compromises that they inevitably contain, and the
impenetrable
                legalese
                 in which they are invariably written,
and the unbelievably tedious bureaucratic process by which they are
produced) can be unnerving to hackers, who are used to a certain
amount of ambiguity in the specifications of the systems they use.
(Hackers feel that such ambiguities are acceptable as long as the

                Right Thing
                 to do is obvious to any thinking observer; sadly,
this casual attitude towards specifications becomes unworkable when
a system becomes popular in the
                Real World
                .) Since a hacker
is likely to feel that a standards document is both unnecessary and
technically deficient, the deprecation inherent in this term may be
directed as much against the standard as against the person who
ought to read it.

RTI /R-T-I/ interj. The mnemonic for the 'return from
   interrupt' instruction on many computers including the 6502 and
   6800. The variant 'RETI' is found among former Z80 hackers
   (almost nobody programs these things in assembler anymore).
   Equivalent to "Now, where was I?" or used to end a
   conversational digression. See
                pop
                ; see also
                POPJ
                .

RTM /R-T-M/ [Usenet: abbreviation for 'Read The Manual']
   1. Politer variant of
                RTFM
                . 2. Robert T. Morris Jr.,
   perpetrator of the great Internet worm of 1988 (see

                Great Worm, the
                ); villain to many, naive hacker gone wrong to a
   few. Morris claimed that the worm that brought the Internet to its
   knees was a benign experiment that got out of control as the result
   of a coding error. After the storm of negative publicity that
   followed this blunder, Morris's username on ITS was hacked from RTM
   to
                RTFM
                .

RTS /R-T-S/ imp. Acronym for 'Read The Screen'. Mainly
   used by hackers in the microcomputer world. Refers to what one
   would like to tell the

                    suit
                     one is forced to explain an
   extremely simple application to. Particularly appropriate when the
   suit failed to notice the 'Press any key to continue' prompt, and
   wishes to know 'why won't it do anything'. Also seen as 'RTFS' in
   especially deserving cases.

rude [WPI] adj. 1. (of a program) Badly written.
   2. Functionally poor, e.g., a program that is very difficult to use
   because of gratuitously poor (random?) design decisions. Oppose

                    cuspy
                    . 3. Anything that manipulates a shared resource without
   regard for its other users in such a way as to cause a (non-fatal)
   problem. Examples: programs that change tty modes without
   resetting them on exit, or windowing programs that keep forcing
   themselves to the top of the window stack. Compare

                    all-elbows
                    .

runes pl.n. 1. Anything that requires
                    heavy wizardry
                        or
                    black art
                     to
                    parse
                    : core dumps, JCL commands, APL, or
   code in a language you haven't a clue how to read. Not quite as
   bad as
                    line noise
                    , but close. Compare
                    casting the runes
                    ,

                    Great Runes
                    . 2. Special display characters (for example, the
   high-half graphics on an IBM PC).

runic adj. Syn.
                    obscure
                    . VMS fans sometimes refer to
   Unix as 'Runix'; Unix fans return the compliment by expanding VMS
   to 'Very Messy Syntax' or 'Vachement Mauvais Syst'eme' (French
   idiom, "Hugely Bad System").

rusty iron n. Syn.
                    tired iron
                    . It has been claimed
   that this is the inevitable fate of
                    water MIPS
                    .

rusty memory n. Mass-storage that uses iron-oxide-based
   magnetic media (esp. tape and the pre-Winchester removable disk
   packs used in
                    washing machine

```
                    s).  Compare
             donuts
                    .
```

rusty wire n. [Amateur Packet Radio] Any very noisy network
   medium, in which the packets are subject to frequent corruption.
   Most prevalent in reference to wireless links subject to all the
   vagaries of RF noise and marginal propagation conditions. "Yes,
   but how good is your whizbang new protocol on really rusty
   wire?".

1.24 S

```
                    S/N ratio // n.   (also 's/n ratio', 's:n ratio').
      Syn.
                    signal-to-noise ratio
                    .  Often abbreviated 'SNR'.
```

sacred adj. Reserved for the exclusive use of something (an
   extension of the standard meaning). Often means that anyone may
   look at the sacred object, but clobbering it will screw whatever it
   is sacred to. The comment "Register 7 is sacred to the interrupt
   handler" appearing in a program would be interpreted by a hacker
   to mean that if any *other* part of the program changes the
   contents of register 7, dire consequences are likely to ensue.

saga n. [WPI] A cuspy but bogus raving story about N
   random broken people.

   Here is a classic example of the saga form, as told by Guy L.
   Steele:

      Jon L. White (login name JONL) and I (GLS) were office mates at
      MIT for many years. One April, we both flew from Boston to
      California for a week on research business, to consult
      face-to-face with some people at Stanford, particularly our
      mutual friend Richard P. Gabriel (RPG; see
                    gabriel
).

      RPG picked us up at the San Francisco airport and drove us back
      to Palo Alto (going
                    logical
                     south on route 101, parallel to

                    El Camino Bignum
). Palo Alto is adjacent to Stanford University
      and about 40 miles south of San Francisco. We ate at The Good
      Earth, a 'health food' restaurant, very popular, the sort whose
      milkshakes all contain honey and protein powder. JONL ordered
      such a shake -- the waitress claimed the flavor of the day was
      "lalaberry". I still have no idea what that might be, but it
      became a running joke. It was the color of raspberry, and JONL
      said it tasted rather bitter. I ate a better tostada there than
```

I have ever had in a Mexican restaurant.

After this we went to the local Uncle Gaylord's Old Fashioned Ice
Cream Parlor. They make ice cream fresh daily, in a variety of
intriguing flavors. It's a chain, and they have a slogan: "If
you don't live near an Uncle Gaylord's -- MOVE!" Also, Uncle
Gaylord (a real person) wages a constant battle to force big-name
ice cream makers to print their ingredients on the package (like
air and plastic and other non-natural garbage). JONL and I had
first discovered Uncle Gaylord's the previous August, when we had
flown to a computer-science conference in Berkeley, California,
the first time either of us had been on the West Coast. When not
in the conference sessions, we had spent our time wandering the
length of Telegraph Avenue, which (like Harvard Square in
Cambridge) was lined with picturesque street vendors and
interesting little shops. On that street we discovered Uncle
Gaylord's Berkeley store. The ice cream there was very good.
During that August visit JONL went absolutely bananas (so to
speak) over one particular flavor, ginger honey.

Therefore, after eating at The Good Earth -- indeed, after every
lunch and dinner and before bed during our April visit -- a trip
to Uncle Gaylord's (the one in Palo Alto) was mandatory. We had
arrived on a Wednesday, and by Thursday evening we had been there
at least four times. Each time, JONL would get ginger honey ice
cream, and proclaim to all bystanders that "Ginger was the spice
that drove the Europeans mad! That's why they sought a route to
the East! They used it to preserve their otherwise off-taste
meat." After the third or fourth repetition RPG and I were
getting a little tired of this spiel, and began to paraphrase
him: "Wow! Ginger! The spice that makes rotten meat taste
good!" "Say! Why don't we find some dog that's been run over
and sat in the sun for a week and put some *ginger* on it for
dinner?!" "Right! With a lalaberry shake!" And so on. This
failed to faze JONL; he took it in good humor, as long as we kept
returning to Uncle Gaylord's. He loves ginger honey ice cream.

Now RPG and his then-wife KBT (Kathy Tracy) were putting us up
(putting up with us?) in their home for our visit, so to thank them
JONL and I took them out to a nice French restaurant of their
choosing. I unadventurously chose the filet mignon, and KBT had
je ne sais quoi du jour, but RPG and JONL had lapin
(rabbit). (Waitress: "Oui, we have fresh rabbit, fresh
today." RPG: "Well, JONL, I guess we won't need any
ginger!")

We finished the meal late, about 11 P.M., which is 2 A.M Boston
time, so JONL and I were rather droopy. But it wasn't yet
midnight. Off to Uncle Gaylord's!

Now the French restaurant was in Redwood City, north of Palo
Alto. In leaving Redwood City, we somehow got onto route 101
going north instead of south. JONL and I wouldn't have known the
difference had RPG not mentioned it. We still knew very little
of the local geography. I did figure out, however, that we were
headed in the direction of Berkeley, and half-jokingly suggested
that we continue north and go to Uncle Gaylord's in Berkeley.

RPG said "Fine!" and we drove on for a while and talked. I was
drowsy, and JONL actually dropped off to sleep for 5 minutes.
When he awoke, RPG said, "Gee, JONL, you must have slept all the
way over the bridge!", referring to the one spanning San
Francisco Bay. Just then we came to a sign that said "University
Avenue". I mumbled something about working our way over to
Telegraph Avenue; RPG said "Right!" and maneuvered some more.
Eventually we pulled up in front of an Uncle Gaylord's.

Now, I hadn't really been paying attention because I was so
sleepy, and I didn't really understand what was happening until
RPG let me in on it a few moments later, but I was just alert
enough to notice that we had somehow come to the Palo Alto Uncle
Gaylord's after all.

JONL noticed the resemblance to the Palo Alto store, but hadn't
caught on. (The place is lit with red and yellow lights at
night, and looks much different from the way it does in
daylight.) He said, "This isn't the Uncle Gaylord's I went to in
Berkeley! It looked like a barn! But this place looks *just
like* the one back in Palo Alto!"

RPG deadpanned, "Well, this is the one *I* always come to when
I'm in Berkeley. They've got two in San Francisco, too.
Remember, they're a chain."

JONL accepted this bit of wisdom. And he was not totally ignorant
--- he knew perfectly well that University Avenue was in Berkeley,
not far from Telegraph Avenue. What he didn't know was that
there is a completely different University Avenue in Palo Alto.

JONL went up to the counter and asked for ginger honey. The guy
at the counter asked whether JONL would like to taste it first,
evidently their standard procedure with that flavor, as not too
many people like it.

JONL said, "I'm sure I like it. Just give me a cone." The guy
behind the counter insisted that JONL try just a taste first.
"Some people think it tastes like soap." JONL insisted, "Look, I
love ginger. I eat Chinese food. I eat raw ginger roots. I
already went through this hassle with the guy back in Palo Alto.
I *know* I like that flavor!"

At the words "back in Palo Alto" the guy behind the counter got a
very strange look on his face, but said nothing. KBT caught his
eye and winked. Through my stupor I still hadn't quite grasped
what was going on, and thought RPG was rolling on the floor
laughing and clutching his stomach just because JONL had launched
into his spiel ("makes rotten meat a dish for princes") for the
forty-third time. At this point, RPG clued me in fully.

RPG, KBT, and I retreated to a table, trying to stifle our
chuckles. JONL remained at the counter, talking about ice cream
with the guy b.t.c., comparing Uncle Gaylord's to other ice cream
shops and generally having a good old time.

At length the g.b.t.c. said, "How's the ginger honey?" JONL
said, "Fine! I wonder what exactly is in it?" Now Uncle Gaylord
publishes all his recipes and even teaches classes on how to make
his ice cream at home. So the g.b.t.c. got out the recipe, and
he and JONL pored over it for a while. But the g.b.t.c. could
contain his curiosity no longer, and asked again, "You really
like that stuff, huh?" JONL said, "Yeah, I've been eating it
constantly back in Palo Alto for the past two days. In fact, I
think this batch is about as good as the cones I got back in Palo
Alto!"

G.b.t.c. looked him straight in the eye and said, "You're
in Palo Alto!"

JONL turned slowly around, and saw the three of us collapse in a
fit of giggles. He clapped a hand to his forehead and exclaimed,
"I've been hacked!"

[My spies on the West Coast inform me that there is a close
relative of the raspberry found out there called an 'ollalieberry'
-- ESR]

[Ironic footnote: it appears that the
              meme
               about ginger vs.
rotting meat may be an urban legend. It's not borne out by an
examination of medieval recipes or period purchase records for
spices, and appears full-blown in the works of Samuel Pegge, a
gourmand and notorious flake case who originated numerous food
myths. -- ESR]

sagan /say'gn/ n. [from Carl Sagan's TV series
   "Cosmos"; think "billions and billions"] A large quantity
   of anything. "There's a sagan different ways to tweak EMACS."
   "The U.S. Government spends sagans on bombs and welfare -- hard
   to say which is more destructive."

SAIL /sayl/, not /S-A-I-L/ n. 1. The Stanford
   Artificial Intelligence Lab. An important site in the early
   development of LISP; with the MIT AI Lab, BBN, CMU, XEROX PARC, and
   the Unix community, one of the major wellsprings of technical
   innovation and hacker-culture traditions (see the
              WAITS
               entry
   for details). The SAIL machines were shut down in late May 1990,
   scant weeks after the MIT AI Lab's ITS cluster was officially
   decommissioned. 2. The Stanford Artificial Intelligence Language
   used at SAIL (sense 1). It was an Algol-60 derivative with a
   corouting facility and some new data types intended for building
   search trees and association lists.

salescritter /sayls'kri'tr/ n. Pejorative hackerism for a
   computer salesperson. Hackers tell the following joke:

   Q. What's the difference between a used-car dealer and a
      computer salesman?
   A. The used-car dealer knows he's lying. [Some versions add:

        ...and probably knows how to drive.]

   This reflects the widespread hacker belief that salescritters are
   self-selected for stupidity (after all, if they had brains and the
   inclination to use them, they'd be in programming). The terms
   'salesthing' and 'salesdroid' are also common. Compare

                 marketroid

                 ,
                 suit

                 ,
                 droid

                 .

salt n. A tiny bit of near-random data inserted where too
   much regularity would be undesirable; a data
                 frob
                  (sense 1).
   For example, the Unix crypt(3) man page mentions that "the salt
   string is used to perturb the DES algorithm in one of 4096
   different ways."

salt mines n. Dense quarters housing large numbers of
   programmers working long hours on grungy projects, with some hope
   of seeing the end of the tunnel in N years. Noted for their
   absence of sunshine. Compare
                 playpen

                 ,
                 sandbox

                 .

salt substrate n. [MIT] Collective noun used to refer to potato
   chips, pretzels, saltines, or any other form of snack food designed
   primarily as a carrier for sodium chloride. From the technical
   term 'chip substrate', used to refer to the silicon on the top
   of which the active parts of integrated circuits are deposited.

same-day service n. Ironic term used to describe long
   response time, particularly with respect to
                 MS-DOS
                  system
   calls (which ought to require only a tiny fraction of a second to
   execute). Such response time is a major incentive for programmers
   to write programs that are not
                 well-behaved
                 . See also

                 PC-ism

                 .

samizdat /sahm-iz-daht/ n. [Russian, literally "self
   publishing"] The process of disseminating documentation via
   underground channels. Originally referred to underground
   duplication and distribution of banned books in the Soviet Union;
   now refers by obvious extension to any less-than-official
   promulgation of textual material, esp. rare, obsolete, or
   never-formally-published computer documentation. Samizdat is

obviously much easier when one has access to high-bandwidth
networks and high-quality laser printers. Note that samizdat is
properly used only with respect to documents which contain needed
information (see also
              hacker ethic, the
) but which are for
some reason otherwise unavailable, but *not* in the context of
documents which are available through normal channels, for which
unauthorized duplication would be unethical copyright violation.
See
              Lions Book
               for a historical example.

samurai n. A hacker who hires out for legal cracking jobs,
   snooping for factions in corporate political fights, lawyers
   pursuing privacy-rights and First Amendment cases, and other
   parties with legitimate reasons to need an electronic locksmith.
   In 1991, mainstream media reported the existence of a loose-knit
   culture of samurai that meets electronically on BBS systems, mostly
   bright teenagers with personal micros; they have modeled themselves
   explicitly on the historical samurai of Japan and on the "net
   cowboys" of William Gibson's
              cyberpunk
               novels. Those
interviewed claim to adhere to a rigid ethic of loyalty to their
employers and to disdain the vandalism and theft practiced by
criminal crackers as beneath them and contrary to the hacker ethic;
some quote Miyamoto Musashi's "Book of Five Rings", a classic
of historical samurai doctrine, in support of these principles.
See also
              sneaker
              ,
              Stupids
              ,
              social engineering
              ,

              cracker
              ,
              hacker ethic, the
              , and
              dark-side hacker
              .

sandbender n. [IBM] A person involved with silicon lithography and
   the physical design of chips. Compare
              ironmonger
              ,
              polygon pusher
              .

sandbox n. 1. (also 'sandbox, the') Common term for the R&D
   department at many software and computer companies (where hackers
   in commercial environments are likely to be found). Half-derisive,
   but reflects the truth that research is a form of creative play.
   Compare
              playpen

```
                      .  2. Syn.
                  link farm
                  .
```

sanity check n. 1. The act of checking a piece of code (or
   anything else, e.g., a Usenet posting) for completely stupid
   mistakes. Implies that the check is to make sure the author was
   sane when it was written; e.g., if a piece of scientific software
   relied on a particular formula and was giving unexpected results,
   one might first look at the nesting of parentheses or the coding of
   the formula, as a 'sanity check', before looking at the more
   complex I/O or data structure manipulation routines, much less the
   algorithm itself. Compare
                  reality check
                  . 2. A run-time test,
   either validating input or ensuring that the program hasn't screwed
   up internally (producing an inconsistent value or state).

Saturday-night special n. [from police slang for a cheap
   handgun] A
                  quick-and-dirty
                   program or feature kluged together
   during off hours, under a deadline, and in response to pressure
   from a
                  salescritter
                  . Such hacks are dangerously unreliable,
   but all too often sneak into a production release after
   insufficient review.

say vt. 1. To type to a terminal. "To list a directory
   verbosely, you have to say 'ls -l'." Tends to imply a
                  newline
                  -terminated command (a 'sentence'). 2. A computer
   may also be said to 'say' things to you, even if it doesn't have
   a speech synthesizer, by displaying them on a terminal in response
   to your commands. Hackers find it odd that this usage confuses
                  mundane
                  s.

scag vt. To destroy the data on a disk, either by
   corrupting the
  filesystem or by causing media damage. "That last power hit scagged
  the system disk." Compare
                  scrog
                  ,
                  roach
                  .

scanno /skan'oh/ n. An error in a document caused by a
   scanner glitch, analogous to a typo or
                  thinko
                  .

schroedinbug /shroh'din-buhg/ n. [MIT: from the
   Schroedinger's Cat thought-experiment in quantum physics] A design

or implementation bug in a program that doesn't manifest until
someone reading source or using the program in an unusual way
notices that it never should have worked, at which point the
program promptly stops working for everybody until fixed. Though
(like

> bit rot

) this sounds impossible, it happens; some
programs have harbored latent schroedinbugs for years. Compare

> heisenbug
>
> ,
> Bohr bug
>
> ,
> mandelbug
>
> .

science-fiction fandom n. Another voluntary subculture
having a very heavy overlap with hackerdom; most hackers read SF
and/or fantasy fiction avidly, and many go to 'cons' (SF
conventions) or are involved in fandom-connected activities such as
the Society for Creative Anachronism. Some hacker jargon
originated in SF fandom; see

> defenestration
>
> ,
> great-wall
>
> ,
>
> cyberpunk
>
> ,
> h
>
> ,
> ha ha only serious
>
> ,
> IMHO
>
> ,
>
> mundane
>
> ,
> neep-neep
>
> ,
> Real Soon Now
>
> . Additionally,

the jargon terms

> cowboy
>
> ,
> cyberspace
>
> ,
> de-rezz
>
> ,
> go flatline
>
> ,
>
> ice
>
> ,
> phage
>
> ,
> virus

```
                 ,
                 wetware
                 ,

                 wirehead
                 , and
                 worm
                  originated in SF stories.
```

scram switch n. [from the nuclear power industry] An
   emergency-power-off switch (see
                 Big Red Switch
                 ), esp. one
   positioned to be easily hit by evacuating personnel. In general,
   this is *not* something you
                 frob
                  lightly; these often
   initiate expensive events (such as Halon dumps) and are installed
   in a
                 dinosaur pen
                  for use in case of electrical fire or in
   case some luckless
                 field servoid
                  should put 120 volts across
   himself while
                 Easter egging
                 . (See also
                 molly-guard
                 ,

                 TMRC
                 .)

scratch 1. [from 'scratchpad'] adj. Describes a data
   structure or recording medium attached to a machine for testing or
   temporary-use purposes; one that can be
                 scribble
                 d on without
   loss. Usually in the combining forms 'scratch memory',
   'scratch register', 'scratch disk', 'scratch tape',
   'scratch volume'. See also
                 scratch monkey
                 . 2. [primarily
   IBM] vt. To delete (as in a file).

scratch monkey n. As in "Before testing or reconfiguring,
   always mount a
                 scratch monkey
                 ", a proverb used to advise
   caution when dealing with irreplaceable data or devices. Used to
   refer to any scratch volume hooked to a computer during any risky
   operation as a replacement for some precious resource or data that
   might otherwise get trashed.

   This term preserves the memory of Mabel, the Swimming Wonder
   Monkey, star of a biological research program at the University of
   Toronto. Mabel was not (so the legend goes) your ordinary monkey;

the university had spent years teaching her how to swim, breathing
through a regulator, in order to study the effects of different gas
mixtures on her physiology. Mabel suffered an untimely demise one
day when a DEC engineer troubleshooting a crash on the program's
VAX inadvertently interfered with some custom hardware that was
wired to Mabel.

It is reported that, after calming down an understandably irate
customer sufficiently to ascertain the facts of the matter, a DEC
troubleshooter called up the
                field circus
                 manager responsible
and asked him sweetly, "Can you swim?"

Not all the consequences to humans were so amusing; the sysop of
the machine in question was nearly thrown in jail at the behest of
certain clueless droids at the local 'humane' society. The moral
is clear: When in doubt, always mount a scratch monkey.

[The actual incident occured in 1979 or 1980. There is a version of
this story, complete with reported dialogue between one of the
project people and DEC field service, that has been circulating on
Internet since 1986. It is hilarious and mythic, but gets some
facts wrong. For example, it reports the machine as a PDP-11 and
alleges that Mabel's demise occurred when DEC
                PM
                ed the
machine. Earlier versions of this entry were based on that story;
this one has been corrected from an interview with the hapless
sysop. -- ESR]

scream and die v. Syn.
                cough and die
                , but connotes
   that an error message was printed or displayed before the program
   crashed.

screaming tty n. [Unix] A terminal line which spews an infinite
   number of random characters at the operating system. This can
   happen if the terminal is either disconnected or connected to a
   powered-off terminal but still enabled for login; misconfiguration,
   misimplementation, or simple bad luck can start such a terminal
   screaming. A screaming tty or two can seriously degrade the
   performance of a vanilla Unix system; the arriving "characters"
   are treated as userid/password pairs and tested as such. The Unix
   password encryption algorithm is designed to be computationally
   intensive in order to foil brute-force crack attacks, so although
   none of the logins succeeds; the overhead of rejecting them all can
   be substantial.

screw n. [MIT] A
                lose
                , usually in software.
   Especially used for user-visible misbehavior caused by a bug or
   misfeature. This use has become quite widespread outside MIT.

screwage /skroo'*j/ n. Like

```
                lossage
                 but connotes
   that the failure is due to a designed-in misfeature rather than a
   simple inadequacy or a mere bug.
```

scribble n. To modify a data structure in a random and
   unintentionally destructive way. "Bletch! Somebody's
   disk-compactor program went berserk and scribbled on the i-node
   table." "It was working fine until one of the allocation
   routines scribbled on low core." Synonymous with
                trash
                ;
   compare
                mung
                , which conveys a bit more intention, and

                mangle
                , which is more violent and final.

scrog /skrog/ vt. [Bell Labs] To damage, trash, or
   corrupt a data structure. "The list header got scrogged." Also
   reported as 'skrog', and ascribed to the comic strip "The
   Wizard of Id". Compare
                scag
                ; possibly the two are related.
   Equivalent to
                scribble
                 or
                mangle
                .

scrool /skrool/ n. [from the pioneering Roundtable chat
   system in Houston ca. 1984; prob. originated as a typo for
   'scroll'] The log of old messages, available for later perusal or
   to help one get back in synch with the conversation. It was
   originally called the 'scrool monster', because an early version
   of the roundtable software had a bug where it would dump all 8K of
   scrool on a user's terminal.

scrozzle /skroz'l/ vt. Used when a self-modifying code
   segment runs incorrectly and corrupts the running program or vital
   data. "The damn compiler scrozzled itself again!"

scruffies n. See
                neats vs. scruffies
                .

SCSI n. [Small Computer System Interface] A bus-independent
   standard for system-level interfacing between a computer and
   intelligent devices. Typically annotated in literature with
   'sexy' (/sek'see/), 'sissy' (/sis'ee/), and 'scuzzy'
   (/skuh'zee/) as pronunciation guides -- the last being the
   overwhelmingly predominant form, much to the dismay of the
   designers and their marketing people. One can usually assume that
   a person who pronounces it /S-C-S-I/ is clueless.

ScumOS /skuhm'os/ or /skuhm'O-S/ n. Unflattering

hackerism for SunOS, the BSD Unix variant supported on Sun
Microsystems's Unix workstations (see also
sun-stools
), and
compare
AIDX
,
Macintrash
,
Nominal Semidestructor
,

Open DeathTrap
,
HP-SUX
. Despite what this term might
suggest, Sun was founded by hackers and still enjoys excellent
relations with hackerdom; usage is more often in exasperation than
outright loathing.

search-and-destroy mode n. Hackerism for a noninteractive
search-and-replace facility in an editor, so called because an
incautiously chosen match pattern can cause
infinite
damage.

second-system effect n. (sometimes, more euphoniously,
'second-system syndrome') When one is designing the successor to
a relatively small, elegant, and successful system, there is a
tendency to become grandiose in one's success and design an

elephantine
feature-laden monstrosity. The term was first
used by Fred Brooks in his classic "The Mythical Man-Month:
Essays on Software Engineering" (Addison-Wesley, 1975; ISBN
0-201-00650-2). It described the jump from a set of nice, simple
operating systems on the IBM 70xx series to OS/360 on the 360
series. A similar effect can also happen in an evolving system;
see
Brooks's Law
,
creeping elegance
,
creeping featurism
.
See also
Multics
,
OS/2
,
X
,
software bloat
.

This version of the jargon lexicon has been described (with
altogether too much truth for comfort) as an example of

second-system effect run amok on jargon-1....

secondary damage n. When a fatal error occurs (esp. a

                segfault
) the immediate cause may be that a pointer has been
    trashed due to a previous
                fandango on core
                . However, this
    fandango may have been due to an *earlier* fandango, so no
    amount of analysis will reveal (directly) how the damage occurred.
    "The data structure was clobbered, but it was secondary
    damage."

    By extension, the corruption resulting from N cascaded
    fandangoes on core is 'Nth-level damage'. There is at least
    one case on record in which 17 hours of
                grovel
                ling with
    'adb' actually dug up the underlying bug behind an instance of
    seventh-level damage! The hacker who accomplished this
    near-superhuman feat was presented with an award by his fellows.

security through obscurity (alt. 'security by obscurity')
    A term applied by hackers to most OS vendors' favorite way of
    coping with security holes -- namely, ignoring them, documenting
    neither any known holes nor the underlying security algorithms,
    trusting that nobody will find out about them and that people who
    do find out about them won't exploit them. This "strategy" never
    works for long and occasionally sets the world up for debacles like
    the
                RTM
                 worm of 1988 (see
                Great Worm, the
                ), but once the
    brief moments of panic created by such events subside most vendors
    are all too willing to turn over and go back to sleep. After all,
    actually fixing the bugs would siphon off the resources needed to
    implement the next user-interface frill on marketing's wish list
    -- and besides, if they started fixing security bugs customers
    might begin to *expect* it and imagine that their warranties
    of merchantability gave them some sort of *right* to a system
    with fewer holes in it than a shotgunned Swiss cheese, and
    then where would we be?

    Historical note: There are conflicting stories about the origin of
    this term. It has been claimed that it was first used in the
    Usenet newsgroup in comp.sys.apollo during a campaign to get
    HP/Apollo to fix security problems in its Unix-
                clone
                  Aegis/DomainOS (they didn't change a thing).
                ITS
                 fans, on the
    other hand, say it was coined years earlier in opposition to the
    incredibly paranoid
                Multics
                 people down the hall, for whom

security was everything. In the ITS culture it referred to (1) the
fact that by the time a tourist figured out how to make
trouble he'd generally gotten over the urge to make it, because he
felt part of the community; and (2) (self-mockingly) the poor
coverage of the documentation and obscurity of many commands. One
instance of *deliberate* security through obscurity is
recorded; the command to allow patching the running ITS system
(
          altmode
           altmode control-R) echoed as $$^D. If you actually
typed alt alt ^D, that set a flag that would prevent patching the
system even if you later got it right.

SED n.   [TMRC, from 'Light-Emitting Diode'] /S-E-D/
   Smoke-emitting diode. A
          friode
           that lost the war. See also

          LER
          .

segfault n.,vi. Syn.
          segment
          ,
          segmentation fault
          .

seggie /seg'ee/ n.   [Unix] Shorthand for

          segmentation fault
           reported from Britain.

segment /seg'ment/ vi. To experience a
          segmentation fault
          .
   Confusingly, this is often pronounced more like the noun
   'segment' than like mainstream v. segment; this is because it is
   actually a noun shorthand that has been verbed.

segmentation fault n. [Unix] 1. An error in which a running
   program attempts to access memory not allocated to it and

          core dump
          s with a segmentation violation error. 2. To lose a
   train of thought or a line of reasoning. Also uttered as an
   exclamation at the point of befuddlement.

segv /seg'vee/ n.,vi. Yet another synonym for

          segmentation fault
           (actually, in this case, 'segmentation
   violation').

self-reference n. See
          self-reference
          .

selvage /sel'v*j/ n. [from sewing and weaving] See

                chad
                 (sense 1).

semi /se'mee/ or /se'mi:/ 1. n. Abbreviation for
   'semicolon', when speaking. "Commands to
                grind
                 are
   prefixed by semi-semi-star" means that the prefix is `;;*',
   not 1/4 of a star. 2. A prefix used with words such as
   'immediately' as a qualifier. "When is the system coming up?"
   "Semi-immediately." (That is, maybe not for an hour.) "We did
   consider that possibility semi-seriously." See also

                infinite
                .

semi-infinite n. See
                infinite
                .

sendmail n. The standard Unix mail agent; written by Eric
   Allman. It is very flexible, but has very
                hairy
                 configuration
   syntax and has had numerous security bugs, because it's a large,
   monolithic program which needs to run with suid root privileges.
   See also
                bug-of-the-month club
                 and
                Great Worm, the
                .

senior bit n. [IBM] Syn.
                meta bit
                .

server n. A kind of
                daemon
                 that performs a service for
   the requester and which often runs on a computer other than the one
   on which the server runs. A particularly common term on the
   Internet, which is rife with 'web servers', 'name servers',
   'domain servers', 'news servers', 'finger servers', and the
   like.

SEX /seks/ [Sun Users' Group & elsewhere] n. 1. Software
   EXchange. A technique invented by the blue-green algae hundreds of
   millions of years ago to speed up their evolution, which had been
   terribly slow up until then. Today, SEX parties are popular among
   hackers and others (of course, these are no longer limited to
   exchanges of genetic software). In general, SEX parties are a

                Good Thing
                , but unprotected SEX can propagate a
                virus

                    .
    See also
                    pubic directory
                    . 2. The rather Freudian mnemonic
    often used for Sign EXtend, a machine instruction found in the
    PDP-11 and many other architectures. The RCA 1802 chip used in the
    early Elf and SuperElf personal computers had a 'SEt X register'
    SEX instruction, but this seems to have had little folkloric
    impact.

    DEC's engineers nearly got a PDP-11 assembler that used the
    'SEX' mnemonic out the door at one time, but (for once)
    marketing wasn't asleep and forced a change. That wasn't the last
    time this happened, either. The author of "The Intel 8086
    Primer", who was one of the original designers of the 8086, noted
    that there was originally a 'SEX' instruction on that
    processor, too. He says that Intel management got cold feet and
    decreed that it be changed, and thus the instruction was renamed
    'CBW' and 'CWD' (depending on what was being extended).
    Amusingly, the Intel 8048 (the microcontroller used in IBM PC
    keyboards) is also missing straight 'SEX' but has logical-or
    and logical-and instructions 'ORL' and 'ANL'.

    The Motorola 6809, used in the U.K.'s 'Dragon 32' personal
    computer, actually had an official 'SEX' instruction; the 6502
    in the Apple II with which it competed did not. British hackers
    thought this made perfect mythic sense; after all, it was commonly
    observed, you could (on some theoretical level) have sex with a
    dragon, but you can't have sex with an apple.

sex changer n. Syn.
                    gender mender
                    .

shambolic link /sham-bol'ik link/ n. A Unix symbolic
    link, particularly when it confuses you, points to nothing at all,
    or results in your ending up in some completely unexpected part of
    the filesystem....

shar file /shar' fi:l/ n. Syn.
                    sharchive
                    .

sharchive /shar'ki:v/ n. [Unix and Usenet; from /bin/sh
    archive] A
                    flatten
                    ed representation of a set of one or more
    files, with the unique property that it can be unflattened (the
    original files restored) by feeding it through a standard Unix
    shell; thus, a sharchive can be distributed to anyone running Unix,
    and no special unpacking software is required. Sharchives are also
    intriguing in that they are typically created by shell scripts; the
    script that produces sharchives is thus a script which produces
    self-unpacking scripts, which may themselves contain scripts. (The
    downsides of sharchives are that they are an ideal venue for

                    Trojan horse

        attacks and that, for recipients not running
    Unix, no simple un-sharchiving program is possible; sharchives can
    and do make use of arbitrarily-powerful shell features.)
    Sharchives are also commonly referred to as 'shar files' after the
    name of the most common program for generating them.

Share and enjoy! imp. 1. Commonly found at the end of
    software release announcements and
                README file
                s, this phrase
    indicates allegiance to the hacker ethic of free information
    sharing (see
                hacker ethic, the
                , sense 1). 2. The motto of the
    Sirius Cybernetics Corporation (the ultimate gaggle of incompetent

                suit
                s) in Douglas Adams's "Hitch Hiker's Guide to the
    Galaxy". The irony of using this as a cultural recognition signal
    appeals to freeware hackers.

shareware /sheir'weir/ n. A kind of
                freeware
                 (sense
    1) for which the author requests some payment, usually in the
    accompanying documentation files or in an announcement made by the
    software itself. Such payment may or may not buy additional
    support or functionality. See also
                careware
                ,

                charityware
                ,
                crippleware
                ,
                FRS
                ,
                guiltware
                ,

                postcardware
                , and
                -ware
                ; compare
                payware
                .

shelfware /shelf'weir/ n. Software purchased on a whim (by
    an individual user) or in accordance with policy (by a corporation
    or government agency), but not actually required for any particular
    use. Therefore, it often ends up on some shelf.

shell [orig.
                Multics
                 n. techspeak, widely propagated
    via Unix] 1. [techspeak] The command interpreter used to pass
    commands to an operating system; so called because it is the part

of the operating system that interfaces with the outside world.
2. More generally, any interface program that mediates access to a
special resource or
                server
                 for convenience, efficiency, or
security reasons; for this meaning, the usage is usually 'a shell
around' whatever. This sort of program is also called a
'wrapper'.

shell out n.   [Unix] To spawn an interactive subshell from within
   a program (e.g., a mailer or editor). "Bang foo runs foo in a
   subshell, while bang alone shells out."

shift left (or right) logical [from any of various
   machines' instruction sets] 1. vi. To move oneself to the left
   (right). To move out of the way. 2. imper. "Get out of that (my)
   seat! You can shift to that empty one to the left (right)."
   Often used without the 'logical', or as 'left shift' instead of
   'shift left'. Sometimes heard as LSH /lish/, from the

                PDP-10
                 instruction set. See
                Programmer's Cheer
                .

shim n.   A small piece of data inserted in order to achieve
   a desired memory alignment or other addressing property. For
   example, the PDP-11 Unix linker, in split I&D (instructions and
   data) mode, inserts a two-byte shim at location 0 in data space so
   that no data object will have an address of 0 (and be confused with
   the C null pointer). See also
                loose bytes
                .

shitogram /shit'oh-gram/ n.   A *really* nasty piece
   of email. Compare
                nastygram
                ,
                flame
                .

short card n.   A half-length IBM XT expansion card or
   adapter that will fit in one of the two short slots located towards
   the right rear of a standard chassis (tucked behind the floppy disk
   drives). See also
                tall card
                .

shotgun debugging n.   The software equivalent of
                Easter egging
                ;
   the making of relatively undirected changes to software in
   the hope that a bug will be perturbed out of existence. This
   almost never works, and usually introduces more bugs.

shovelware /shuh'v*l-weir'/ n.   Extra software dumped onto
   a CD-ROM or tape to fill up the remaining space on the medium after

the software distribution it's intended to carry, but not
integrated with the distribution.

showstopper n.   A hardware or (especially) software bug that
makes an implementation effectively unusable; one that absolutely
has to be fixed before development can go on. Opposite in
connotation from its original theatrical use, which refers to
something stunningly *good*.

shriek n.   See
              excl
              . Occasional CMU usage, also in
common use among APL fans and mathematicians, especially category
theorists.

Shub-Internet /shuhb' in't*r-net/ n.   [MUD: from
H. P. Lovecraft's evil fictional deity 'Shub-Niggurath', the
Black Goat with a Thousand Young] The harsh personification of the
Internet, Beast of a Thousand Processes, Eater of Characters,
Avatar of Line Noise, and Imp of Call Waiting; the hideous
multi-tendriled entity formed of all the manifold connections of
the net. A sect of MUDders worships Shub-Internet, sacrificing
objects and praying for good connections. To no avail -- its
purpose is malign and evil, and is the cause of all network
slowdown. Often heard as in "Freela casts a tac nuke at
Shub-Internet for slowing her down." (A forged response often
follows along the lines of: "Shub-Internet gulps down the tac nuke
and burps happily.") Also cursed by users of
              FTP
               and

              TELNET
               when the system slows down. The dread name of
Shub-Internet is seldom spoken aloud, as it is said that repeating
it three times will cause the being to wake, deep within its lair
beneath the Pentagon.

[January 1996: It develops that one of the computer administrators
in the basement of the Pentagon read this entry and fell over
laughing. As a result, you too can now poke Shub-Internet by
pinging shub-internet.ims.disa.mil. See also
              kremvax
              . --
ESR]

sidecar n.   1. Syn.
              slap on the side
              . Esp. used of
add-ons for the late and unlamented IBM PCjr. 2. The IBM PC
compatibility box that could be bolted onto the side of an Amiga.
Designed and produced by Commodore, it broke all of the company's
own design rules. If it worked with any other peripherals, it was
by
              magic
              . 3. More generally, any of various devices designed
to be connected to the expansion slot on the left side of the Amiga
500 (and later, 600 & 1200), which included a hard drive

   controller, a hard drive, and additional memory.

SIG /sig/ n. (also common as a prefix in combining forms)
   A Special Interest Group, in one of several technical areas,
   sponsored by the Association for Computing Machinery; well-known
   ones include SIGPLAN (the Special Interest Group on Programming
   Languages), SIGARCH (the Special Interest Group for Computer
   Architecture) and SIGGRAPH (the Special Interest Group for Computer
   Graphics). Hackers, not surprisingly, like to overextend this
   naming convention to less formal associations like SIGBEER (at ACM
   conferences) and SIGFOOD (at University of Illinois).

sig block /sig blok/ n. [Unix; often written '.sig'
   there] Short for 'signature', used specifically to refer to the
   electronic signature block that most Unix mail- and news-posting
   software will
               automagically
                append to outgoing mail and news.
   The composition of one's sig can be quite an art form, including an
   ASCII logo or one's choice of witty sayings (see
               sig quote
               ,
               fool file, the
               ); but many consider large sigs a waste of

               bandwidth
               , and it has been observed that the size of one's sig
   block is usually inversely proportional to one's longevity and
   level of prestige on the net. See also
               doubled sig
               .

sig quote /sig kwoht/ n. [Usenet] A maxim, quote, proverb, joke,
   or slogan embedded in one's
               sig block
                and intended to convey
   something of one's philosophical stance, pet peeves, or sense of
   humor. "Calm down, it's only ones and zeroes."

sig virus n. A parasitic
               meme
                embedded in a
               sig block
               .
   There was a
               meme plague
                or fad for these on Usenet in
   late 1991. Most were equivalents of "I am a .sig virus. Please
   reproduce me in your .sig block.". Of course, the .sig virus's
   memetic hook is the giggle value of going along with the gag; this,
   however, was a self-limiting phenomenon as more and more people
   picked up on the idea. There were creative variants on it; some
   people stuck 'sig virus antibody' texts in their sigs, and there
   was at least one instance of a sig virus eater.

signal-to-noise ratio [from analog electronics] n. Used by

hackers in a generalization of its technical meaning. 'Signal'
refers to useful information conveyed by some communications
medium, and 'noise' to anything else on that medium. Hence a low
ratio implies that it is not worth paying attention to the medium
in question. Figures for such metaphorical ratios are never given.
The term is most often applied to
                Usenet
                 newsgroups during

                flame war
                s. Compare
                bandwidth
                . See also
                coefficient of X
                ,

                lost in the noise
                .

silicon n. Hardware, esp. ICs or microprocessor-based
   computer systems (compare
                iron
). Contrasted with software.
   See also
                sandbender
                .

silly walk vi. [from Monty Python's Flying Circus] 1. A
   ridiculous procedure required to accomplish a task. Like

                grovel
                , but more
                random
                 and humorous. "I had to
   silly-walk through half the /usr directories to find the maps
   file." 2. Syn.
                fandango on core
                .

silo n. The FIFO input-character buffer in an RS-232 line
   card. So called from DEC terminology used on DH and DZ line cards
   for the VAX and PDP-11, presumably because it was a storage space
   for fungible stuff that went in at the top and came out at the
   bottom.

Silver Book n. Jensen and Wirth's infamous "Pascal
   User Manual and Report", so called because of the silver cover of
   the widely distributed Springer-Verlag second edition of 1978 (ISBN
   0-387-90144-2). See
                book titles
                ,
                Pascal
                .

since time T equals minus infinity adv. A long time ago;
   for as long as anyone can remember; at the time that some
   particular frob was first designed. Usually the word 'time' is

```
     omitted.  See also
               time T
               ; contrast
               epoch
               .

sitename /si:t'naym/ n.  [Unix/Internet] The unique
   electronic name of a computer system, used to identify it in UUCP
   mail, Usenet, or other forms of electronic information interchange.
   The folklore interest of sitenames stems from the creativity and
   humor they often display.  Interpreting a sitename is not unlike
   interpreting a vanity license plate; one has to mentally unpack it,
   allowing for mono-case and length restrictions and the lack of
   whitespace.  Hacker tradition deprecates dull,
   institutional-sounding names in favor of punchy, humorous, and
   clever coinages (except that it is considered appropriate for the
   official public gateway machine of an organization to bear the
   organization's name or acronym).  Mythological references, cartoon
   characters, animal names, and allusions to SF or fantasy literature
   are probably the most popular sources for sitenames (in roughly
   descending order).  The obligatory comment when discussing these is
   Harris's Lament: "All the good ones are taken!"  See also

               network address
               .

skrog v.  Syn.
               scrog
               .

skulker n.  Syn.
               prowler
               .

slab [Apple]  1. n. A continuous horizontal line of pixels,
   all with the same color.  2. vi. To paint a slab on an output
   device.  Apple's QuickDraw, like most other professional-level
   graphics systems, renders polygons and lines not with Bresenham's
   algorithm, but by calculating 'slab points' for each scan line
   on the screen in succession, and then slabbing in the actual image
   pixels.

slack n.  1. Space allocated to a disk file but not actually
   used to store useful information.  The techspeak equivalent is
   'internal fragmentation'.  Antonym:
               hole
               . 2. In the theology
   of the
               Church of the SubGenius
               , a mystical substance or
   quality that is the prerequisite of all human happiness.

   Since Unix files are stored compactly, except for the unavoidable
   wastage in the last block or fragment, it might be said that "Unix
   has no slack".  See
               ha ha only serious
               .
```

slap on the side n. (also called a
                sidecar
                , or
   abbreviated 'SOTS'.) A type of external expansion hardware
   marketed by computer manufacturers (e.g., Commodore for the Amiga
   500/1000 series and IBM for the hideous failure called 'PCjr').
   Various SOTS boxes provided necessities such as memory, hard drive
   controllers, and conventional expansion slots.

slash n. Common name for the slant ('/', ASCII 0101111)
   character. See
                ASCII
                 for other synonyms.

sleep vi. 1. [techspeak] To relinquish a claim (of a
   process on a multitasking system) for service; to indicate to the
   scheduler that a process may be deactivated until some given event
   occurs or a specified time delay elapses. 2. In jargon, used very
   similarly to v.
                block
                ; also in 'sleep on', syn. with
   'block on'. Often used to indicate that the speaker has
   relinquished a demand for resources until some (possibly
   unspecified) external event: "They can't get the fix I've been
   asking for into the next release, so I'm going to sleep on it until
   the release, then start hassling them again."

slim n. A small, derivative change (e.g., to code).

slop n. 1. A one-sided
                fudge factor
                , that is, an
   allowance for error but in only one of two directions. For
   example, if you need a piece of wire 10 feet long and have to guess
   when you cut it, you make very sure to cut it too long, by a large
   amount if necessary, rather than too short by even a little bit,
   because you can always cut off the slop but you can't paste it back
   on again. When discrete quantities are involved, slop is often
   introduced to avoid the possibility of being on the losing side of
   a
                fencepost error
                . 2. The percentage of 'extra' code
   generated by a compiler over the size of equivalent assembler code
   produced by
                hand-hacking
                ; i.e., the space (or maybe time) you
   lose because you didn't do it yourself. This number is often used
   as a measure of the goodness of a compiler; slop below 5% is very
   good, and 10% is usually acceptable. With modern compiler
   technology, esp. on RISC machines, the compiler's slop may
   actually be *negative*; that is, humans may be unable to
   generate code as good. This is one of the reasons assembler
   programming is no longer common.

slopsucker /slop'suhk-r/ n. A lowest-priority task that
   waits around until everything else has 'had its fill' of machine

resources. Only when the machine would otherwise be idle is the
task allowed to 'suck up the slop'. Also called a 'hungry puppy'
or 'bottom feeder'. One common variety of slopsucker hunts for
large prime numbers. Compare
              background
              .

slurp vt. To read a large data file entirely into
              core
                 before working on it. This may be contrasted with the strategy ↩
                    of
   reading a small piece at a time, processing it, and then reading
   the next piece. "This program slurps in a 1K-by-1K matrix and
   does an FFT." See also
              sponge
              .

smart adj. Said of a program that does the
              Right Thing
                 in a wide variety of complicated circumstances. There is a
   difference between calling a program smart and calling it
   intelligent; in particular, there do not exist any intelligent
   programs (yet -- see
              AI-complete
). Compare
              robust
                 (smart programs can be
              brittle
).

smart terminal n. 1. A terminal that has enough computing
   capability to render graphics or to offload some kind of front-end
   processing from the computer it talks to. The development of
   workstations and personal computers has made this term and the
   product it describes semi-obsolescent, but one may still hear
   variants of the phrase 'act like a smart terminal' used to
   describe the behavior of workstations or PCs with respect to
   programs that execute almost entirely out of a remote
              server
              's
   storage, using local devices as displays. 2. obs. Any terminal with
   an addressable cursor; the opposite of a
              glass tty
              . Today, a
   terminal with merely an addressable cursor, but with none of the
   more-powerful features mentioned in sense 1, is called a

              dumb terminal
              .

   There is a classic quote from Rob Pike (inventor of the
              blit
                 terminal): "A smart terminal is not a smart*ass* terminal,
   but rather a terminal you can educate." This illustrates a common
   design problem: The attempt to make peripherals (or anything else)
   intelligent sometimes results in finicky, rigid 'special
   features' that become just so much dead weight if you try to use

    the device in any way the designer didn't anticipate. Flexibility
    and programmability, on the other hand, are *really* smart.
    Compare
                hook
                .

smash case vi. To lose or obliterate the
    uppercase/lowercase distinction in text input. "MS-DOS will
    automatically smash case in the names of all the files you
    create." Compare
                fold case
                .

smash the stack n. [C programming] To corrupt the execution
    stack by writing past the end of a local array or other data
    structure. Code that smashes the stack can cause a return from the
    routine to jump to a random address, resulting in some of the most
    insidious data-dependent bugs known to mankind. Variants include
    'trash' the stack,
                scribble
                 the stack,
                mangle
                 the
    stack; the term **
                mung
                 the stack is not used, as this is never
    done intentionally. See
                spam
                ; see also
                aliasing bug
                ,

                fandango on core
                ,
                memory leak
                ,
                memory smash
                ,

                precedence lossage
                ,
                overrun screw
                .

smiley n. See
                emoticon
                .

smoke vi. 1. To
                crash
                 or blow up, usually
    spectacularly. "The new version smoked, just like the last one."
    Used for both hardware (where it often describes an actual physical
    event), and software (where it's merely colorful). 2. [from
    automotive slang] To be conspicuously fast. "That processor
    really smokes." Compare
                magic smoke

.

smoke and mirrors n. Marketing deceptions. The term is
   mainstream in this general sense. Among hackers it's strongly
   associated with bogus demos and crocked
                benchmark
                s (see also

                MIPS
                ,
                machoflops
). "They claim their new box cranks 50
   MIPS for under $5000, but didn't specify the instruction mix ---
   sounds like smoke and mirrors to me." The phrase, popularized by
   newspaper columnist Jimmy Breslin c.1975, has been said to
   derive from carnie slang for magic acts and 'freak show' displays
   that depend on 'trompe l'oeil' effects, but also calls to mind
   the fierce Aztec god Tezcatlipoca (lit. "Smoking Mirror") for
   whom the hearts of huge numbers of human sacrificial victims were
   regularly cut out. Upon hearing about a rigged demo or yet another
   round of fantasy-based marketing promises, hackers often feel
   analogously disheartened. See also
                stealth manager
                .

smoke test n. 1. A rudimentary form of testing applied to
   electronic equipment following repair or reconfiguration, in which
   power is applied and the tester checks for sparks, smoke, or other
   dramatic signs of fundamental failure. See
                magic smoke
                .
   2. By extension, the first run of a piece of software after
   construction or a critical change. See and compare
                reality check
                .

   There is an interesting semi-parallel to this term among
   typographers and printers: When new typefaces are being punch-cut
   by hand, a 'smoke test' (hold the letter in candle smoke, then
   press it onto paper) is used to check out new dies.

smoking clover n. [ITS] A
                display hack
                 originally due
   to Bill Gosper. Many convergent lines are drawn on a color monitor
   in
                AOS
                 mode (so that every pixel struck has its color
   incremented). The lines all have one endpoint in the middle of the
   screen; the other endpoints are spaced one pixel apart around the
   perimeter of a large square. The color map is then repeatedly
   rotated. This results in a striking, rainbow-hued, shimmering
   four-leaf clover. Gosper joked about keeping it hidden from the
   FDA (the U.S.'s Food and Drug Administration) lest its
   hallucinogenic properties cause it to be banned.

SMOP /S-M-O-P/ n. [Simple (or Small) Matter of

Programming] 1. A piece of code, not yet written, whose anticipated
length is significantly greater than its complexity. Used to refer
to a program that could obviously be written, but is not worth the
trouble. Also used ironically to imply that a difficult problem
can be easily solved because a program can be written to do it; the
irony is that it is very clear that writing such a program will be
a great deal of work. "It's easy to enhance a FORTRAN compiler to
compile COBOL as well; it's just an SMOP." 2. Often used
ironically by the intended victim when a suggestion for a program
is made which seems easy to the suggester, but is obviously (to the
victim) a lot of work.

smurf /smerf/ n. [from the soc.motss newsgroup on
Usenet, after some obnoxiously gooey cartoon characters] A
newsgroup regular with a habitual style that is irreverent, silly,
and cute. Like many other hackish terms for people, this one
may be praise or insult depending on who uses it. In general,
being referred to as a smurf is probably not going to make your day
unless you've previously adopted the label yourself in a spirit of
irony. Compare
                    old fart
                    .

SNAFU principle /sna'foo prin'si-pl/ n. [from a WWII Army
acronym for 'Situation Normal, All Fucked Up'] "True
communication is possible only between equals, because inferiors
are more consistently rewarded for telling their superiors pleasant
lies than for telling the truth." -- a central tenet of

            Discordianism
            , often invoked by hackers to explain why
authoritarian hierarchies screw up so reliably and systematically.
The effect of the SNAFU principle is a progressive disconnection of
decision-makers from reality. This lightly adapted version of a
fable dating back to the early 1960s illustrates the phenomenon
perfectly:

   In the beginning was the plan,
        and then the specification;
   And the plan was without form,
        and the specification was void.

   And darkness
        was on the faces of the implementors thereof;
   And they spake unto their leader,
        saying:
   "It is a crock of shit,
        and smells as of a sewer."

   And the leader took pity on them,
        and spoke to the project leader:
   "It is a crock of excrement,
        and none may abide the odor thereof."

   And the project leader
        spake unto his section head, saying:
   "It is a container of excrement,

          and it is very strong, such that none may abide it."

     The section head then hurried to his department manager,
          and informed him thus:
     "It is a vessel of fertilizer,
          and none may abide its strength."

     The department manager carried these words
          to his general manager,
     and spoke unto him
          saying:
     "It containeth that which aideth the growth of plants,
          and it is very strong."

     And so it was that the general manager rejoiced
          and delivered the good news unto the Vice President.
     "It promoteth growth,
          and it is very powerful."

     The Vice President rushed to the President's side,
          and joyously exclaimed:
     "This powerful new software product
          will promote the growth of the company!"

     And the President looked upon the product,
          and saw that it was very good.

  After the subsequent and inevitable disaster, the
               suit
               s
  protect themselves by saying "I was misinformed!", and the
  implementors are demoted or fired.

snail vt. To
               snail-mail
                something. "Snail me a copy
  of those graphics, will you?"

snail-mail n. Paper mail, as opposed to electronic.
  Sometimes written as the single word 'SnailMail'. One's postal
  address is, correspondingly, a 'snail address'. Derives from
  earlier coinage 'USnail' (from 'U.S. Mail'), for which
  there have even been parody posters and stamps made. Oppose

          email
          .

snap v. To replace a pointer to a pointer with a direct
  pointer; to replace an old address with the forwarding address
  found there. If you telephone the main number for an institution
  and ask for a particular person by name, the operator may tell you
  that person's extension before connecting you, in the hopes that
  you will 'snap your pointer' and dial direct next time. The
  underlying metaphor may be that of a rubber band stretched through
  a number of intermediate points; if you remove all the thumbtacks
  in the middle, it snaps into a straight line from first to last.
  See

```
                chase pointers
                .
```

Often, the behavior of a
                trampoline
                 is to perform an error
check once and then snap the pointer that invoked it so as
henceforth to bypass the trampoline (and its one-shot error check).
In this context one also speaks of 'snapping links'. For
example, in a LISP implementation, a function interface trampoline
might check to make sure that the caller is passing the correct
number of arguments; if it is, and if the caller and the callee are
both compiled, then snapping the link allows that particular path
to use a direct procedure-call instruction with no further
overhead.

snarf /snarf/ vt. 1. To grab, esp. to grab a large
document or file for the purpose of using it with or without the
author's permission. See also
                BLT
                . 2. [in the Unix
community] To fetch a file or set of files across a network. See
also
                blast
                . This term was mainstream in the late 1960s,
meaning 'to eat piggishly'. It may still have this connotation in
context. "He's in the snarfing phase of hacking --
                FTP
                ing
megs of stuff a day." 3. To acquire, with little concern for
legal forms or politesse (but not quite by stealing). "They
were giving away samples, so I snarfed a bunch of them."
4. Syn. for
                slurp
                . "This program starts by snarfing the
entire database into core, then...." 5. [GEnie] To spray
food or
                programming fluid
                s due to laughing at the wrong
moment. "I was drinking coffee, and when I read your post I
snarfed all over my desk." "If I keep reading this topic, I
think I'll have to snarf-proof my computer with a keyboard
                condom
                ." [This sense appears to be widespread among mundane
teenagers -- ESR]

snarf & barf /snarf'n-barf'/ n. Under a
                WIMP environment
                , the act
of grabbing a region of text and then stuffing the contents of that
region into another region (or the same one) to avoid retyping a
command line. In the late 1960s, this was a mainstream expression
for an 'eat now, regret it later' cheap-restaurant expedition.

snarf down v. To
                snarf

                              , with the connotation of
   absorbing, processing, or understanding. "I'll snarf down the
   latest version of the
                 nethack
                  user's guide -- it's been a
   while since I played last and I don't know what's changed
   recently."

snark n.   [Lewis Carroll, via the Michigan Terminal System]
   1. A system failure. When a user's process bombed, the operator
   would get the message "Help, Help, Snark in MTS!" 2. More
   generally, any kind of unexplained or threatening event on a
   computer (especially if it might be a boojum). Often used to refer
   to an event or a log file entry that might indicate an attempted
   security violation. See
                 snivitz
                 . 3. UUCP name of
   snark.thyrsus.com, home site of the Jargon File versions from
   2.*.* on (i.e., this lexicon).

sneaker n. An individual hired to break into places in
   order to test their security; analogous to
                 tiger team
                 .
   Compare
                 samurai
                 .

sneakernet /snee'ker-net/ n. Term used (generally with
   ironic intent) for transfer of electronic information by physically
   carrying tape, disks, or some other media from one machine to
   another. "Never underestimate the bandwidth of a station wagon
   filled with magtape, or a 747 filled with CD-ROMs." Also called
   'Tennis-Net', 'Armpit-Net', 'Floppy-Net' or 'Shoenet'.

sniff v.,n. Synonym for
                 poll
                 .

snivitz /sniv'itz/ n. A hiccup in hardware or software; a
   small, transient problem of unknown origin (less serious than a

                 snark
). Compare
                 glitch
                 .

SO /S-O/ n. 1. (also 'S.O.') Abbrev. for Significant
   Other, almost invariably written abbreviated and pronounced /S-O/
   by hackers. Used to refer to one's primary relationship, esp. a
   live-in to whom one is not married. See
                 MOTAS
                 ,
                 MOTOS
                 ,

                 MOTSS

. 2. The Shift Out control character in ASCII
(Control-N, 0001110).

social engineering n. Term used among
cracker
s and

samurai
 for cracking techniques that rely on weaknesses in

wetware
 rather than software; the aim is to trick people into
revealing passwords or other information that compromises a target
system's security. Classic scams include phoning up a mark who has
the required information and posing as a field service tech or a
fellow employee with an urgent access problem. See also the

tiger team
 story in the
patch
 entry.

social science number n.   [IBM] A statistic that is

content-free
, or nearly so. A measure derived via methods of
questionable validity from data of a dubious and vague nature.
Predictively, having a social science number in hand is seldom much
better than nothing, and can be considerably worse. As a rule,

management
 loves them. See also
numbers
,
math-out
,

pretty pictures
.

soft boot n. See
boot
.

softcopy /soft'kop-ee/ n. [by analogy with 'hardcopy']
A machine-readable form of corresponding hardcopy. See
bits
,

machinable
.

software bloat n. The results of
second-system effect
    or
creeping featuritis
. Commonly cited examples include

    'ls(1)',

                    X

                    ,

                    BSD

                    ,

                    Missed'em-five

                    , and

                    OS/2

                    .

software hoarding n. Pejorative term employed by members and
   adherents of the
                    GNU
                     project to describe the act of holding
   software proprietary, keeping it under trade secret or license
   terms which prohibit free redistribution and modification. Used
   primarily in Free Software Foundation propaganda. For a summary
   of relared issues, see
                    GNU
                    .

software laser n. An optical laser works by bouncing
   photons back and forth between two mirrors, one totally reflective
   and one partially reflective. If the lasing material (usually a
   crystal) has the right properties, photons scattering off the atoms
   in the crystal will excite cascades of more photons, all in
   lockstep. Eventually the beam will escape through the
   partially-reflective mirror. One kind of
                    sorcerer's apprentice mode
                      involving
                    bounce message
                    s can produce closely analogous results,
   with a
                    cascade
                     of messages escaping to flood nearby
   systems. By mid-1993 there had been at least two publicized
   incidents of this kind.

software rot n. Term used to describe the tendency of
   software that has not been used in a while to
                    lose
                    ; such
   failure may be semi-humorously ascribed to
                    bit rot
                    . More
   commonly, 'software rot' strikes when a program's assumptions
   become out of date. If the design was insufficiently
                    robust
                    ,
   this may cause it to fail in mysterious ways.

   For example, owing to endemic shortsightedness in the design of
   COBOL programs, most will succumb to software rot when their
   2-digit year counters
                    wrap around
                     at the beginning of the
   year 2000. Actually, related lossages often afflict centenarians

who have to deal with computer software designed by unimaginative
clods. One such incident became the focus of a minor public flap
in 1990, when a gentleman born in 1889 applied for a driver's
license renewal in Raleigh, North Carolina. The new system
refused to issue the card, probably because with 2-digit years the
ages 101 and 1 cannot be distinguished.

Historical note: Software rot in an even funnier sense than the
mythical one was a real problem on early research computers (e.g.,
the R1; see

                grind crank
). If a program that depended on a
peculiar instruction hadn't been run in quite a while, the user
might discover that the opcodes no longer did the same things they
once did. ("Hey, so-and-so needs an instruction to do
such-and-such. We can

                snarf
                this opcode, right? No one uses
it.")

Another classic example of this sprang from the time an MIT hacker
found a simple way to double the speed of the unconditional jump
instruction on a PDP-6, so he patched the hardware. Unfortunately,
this broke some fragile timing software in a music-playing program,
throwing its output out of tune. This was fixed by adding a
defensive initialization routine to compare the speed of a timing
loop with the real-time clock; in other words, it figured out how
fast the PDP-6 was that day, and corrected appropriately.

Compare

                bit rot
                .

softwarily /soft-weir'i-lee/ adv. In a way pertaining to
   software. "The system is softwarily unreliable." The adjective
   **'softwary' is *not* used. See

                hardwarily
                .

softy n. [IBM] Hardware hackers' term for a software expert who
   is largely ignorant of the mysteries of hardware.

some random X adj. Used to indicate a member of class X,
   with the implication that Xs are interchangeable. "I think some
   random cracker tripped over the guest timeout last night." See
   also

                J. Random
                .

sorcerer's apprentice mode n. [from Goethe's "Der
   Zauberlehrling" via Paul Dukas's "L'apprenti sorcier" the film
   "Fantasia"] A bug in a protocol where, under some
   circumstances, the receipt of a message causes multiple messages to
   be sent, each of which, when received, triggers the same bug. Used
   esp. of such behavior caused by

                bounce message
                 loops in

                    email
                     software. Compare
                    broadcast storm
                    ,
                    network meltdown
                    ,

                    software laser
                    ,
                    ARMM
                    .

SOS n.,obs. /S-O-S/ 1. An infamously
                    losing
                     text
    editor. Once, back in the 1960s, when a text editor was needed for
    the PDP-6, a hacker crufted together a
                    quick-and-dirty
                       'stopgap editor' to be used until a better one was written.
    Unfortunately, the old one was never really discarded when new ones
    (in particular,
                    TECO
) came along. SOS is a descendant ('Son
    of Stopgap') of that editor, and many PDP-10 users gained the
    dubious pleasure of its acquaintance. Since then other programs
    similar in style to SOS have been written, notably the early font
    editor BILOS /bye'lohs/, the Brother-In-Law Of Stopgap (the
    alternate expansion 'Bastard Issue, Loins of Stopgap' has been
    proposed). 2. /sos/ vt. To decrease; inverse of
                    AOS
                    , from
    the PDP-10 instruction set.

source of all good bits n. A person from whom (or a place
    from which) useful information may be obtained. If you need to
    know about a program, a
                    guru
                     might be the source of all good
    bits. The title is often applied to a particularly competent
    secretary.

space-cadet keyboard n. A now-legendary device used on MIT
    LISP machines, which inspired several still-current jargon terms
    and influenced the design of
                    EMACS
                    . It was equipped with no
    fewer than *seven* shift keys: four keys for
                    bucky bits
                       ('control', 'meta', 'hyper', and 'super') and three like
    regular shift keys, called 'shift', 'top', and 'front'. Many
    keys had three symbols on them: a letter and a symbol on the top,
    and a Greek letter on the front. For example, the 'L' key had an
    'L' and a two-way arrow on the top, and the Greek letter lambda on
    the front. By pressing this key with the right hand while playing
    an appropriate 'chord' with the left hand on the shift keys, you
    could get the following results:

```
    L
          lowercase l

    shift-L
          uppercase L

    front-L
          lowercase lambda

    front-shift-L
          uppercase lambda

    top-L
          two-way arrow (front and shift are ignored)
```

   And of course each of these might also be typed with any
   combination of the control, meta, hyper, and super keys. On this
   keyboard, you could type over 8000 different characters! This
   allowed the user to type very complicated mathematical text, and
   also to have thousands of single-character commands at his
   disposal. Many hackers were actually willing to memorize the
   command meanings of that many characters if it reduced typing time
   (this attitude obviously shaped the interface of EMACS). Other
   hackers, however, thought having that many bucky bits was overkill,
   and objected that such a keyboard can require three or four hands
   to operate. See
                 bucky bits
                 ,
                 cokebottle
                 ,
                 double bucky
                 ,

                 meta bit
                 ,
                 quadruple bucky
                 .

   Note: early versions of this entry incorrectly identified the
   space-cadet keyboard with the 'Knight keyboard'. Though both
   were designed by Tom Knight, the latter term was properly applied
   only to a keyboard used for ITS on the PDP-10 and modeled on the
   Stanford keyboard (as described under
                 bucky bits
). The true
   space-cadet keyboard evolved from the first Knight keyboard.

spaceship operator n. The glyph <=>, so-called apparently
   because in the low-resolution constant-width font used on many
   terminals it vaguely resembles a flying saucer.
                 Perl
                  uses
   this to describe the signum-of-difference operation.

SPACEWAR n. A space-combat simulation game, inspired by
   E. E. "Doc" Smith's "Lensman" books, in which two

spaceships duel around a central sun, shooting torpedoes at each
other and jumping through hyperspace. This game was first
implemented on the PDP-1 at MIT in 1960--61. SPACEWAR aficionados
formed the core of the early hacker culture at MIT. Nine years
later, a descendant of the game motivated Ken Thompson to build, in
his spare time on a scavenged PDP-7, the operating system that
became
                Unix
                . Less than nine years after that, SPACEWAR was
commercialized as one of the first video games; descendants are
still
                feep
                ing in video arcades everywhere.

spaghetti code n. Code with a complex and tangled control
   structure, esp. one using many GOTOs, exceptions, or other
   'unstructured' branching constructs. Pejorative. The synonym
   'kangaroo code' has been reported, doubtless because such code
   has so many jumps in it.

spaghetti inheritance n. [encountered among users of
   object-oriented languages that use inheritance, such as Smalltalk]
   A convoluted class-subclass graph, often resulting from carelessly
   deriving subclasses from other classes just for the sake of reusing
   their code. Coined in a (successful) attempt to discourage such
   practice, through guilt-by-association with
                spaghetti code
                .

spam vt.,vi.,n. [from "Monty Python's Flying Circus"]
   1. To crash a program by overrunning a fixed-size buffer with
   excessively large input data. See also
                buffer overflow
                ,

                overrun screw
                ,
                smash the stack
                . 2. To cause a newsgroup
   to be flooded with irrelevant or inappropriate messages. You can
   spam a newsgroup with as little as one well- (or ill-) planned
   message (e.g. asking "What do you think of abortion?" on
   soc.women). This is often done with
                cross-post
                ing
   (e.g. any message which is crossposted to alt.rush-limbaugh
   and alt.politics.homosexuality will almost inevitably spam
   both groups). 3. To send many identical or nearly-identical
   messages separately to a large number of Usenet newsgroups. This
   is one sure way to infuriate nearly everyone on the Net.

   The second and third definitions have become much more prevalent as
   the Internet has opened up to non-techies, and to many Usenetters
   #3 is now (1995) primary. .

special-case vt. To write unique code to handle input to or
   situations arising in a program that are somehow distinguished from

normal processing. This would be used for processing of mode
switches or interrupt characters in an interactive interface (as
opposed, say, to text entry or normal commands), or for processing
of

            hidden flag
            s in the input of a batch program or

            filter
            .

speedometer n. A pattern of lights displayed on a linear
   set of LEDs (today) or nixie tubes (yesterday, on ancient
   mainframes). The pattern is shifted left every N times the
   operating system goes through its
            main loop
            . A swiftly moving
   pattern indicates that the system is mostly idle; the speedometer
   slows down as the system becomes overloaded. The speedometer on
   Sun Microsystems hardware bounces back and forth like the eyes on
   one of the Cylons from the wretched "Battlestar Galactica" TV
   series.

   Historical note: One computer, the GE 600 (later Honeywell 6000)
   actually had an *analog* speedometer on the front panel,
   calibrated in instructions executed per second.

spell n. Syn.
            incantation
            .

spelling flame n.   [Usenet] A posting ostentatiously
   correcting a previous article's spelling as a way of casting scorn
   on the point the article was trying to make, instead of actually
   responding to that point (compare
            dictionary flame
). Of
   course, people who are more than usually slovenly spellers are
   prone to think *any* correction is a spelling flame. It's an
   amusing comment on human nature that spelling flames themselves
   often contain spelling errors.

spiffy /spi'fee/ adj. 1. Said of programs having a
   pretty, clever, or exceptionally well-designed interface. "Have
   you seen the spiffy
            X
             version of
            empire
             yet?" 2. Said
   sarcastically of a program that is perceived to have little more
   than a flashy interface going for it. Which meaning should be
   drawn depends delicately on tone of voice and context. This word
   was common mainstream slang during the 1940s, in a sense close to
   1.

spike v. To defeat a selection mechanism by introducing a
   (sometimes temporary) device that forces a specific result. The
   word is used in several industries; telephone engineers refer to

spiking a relay by inserting a pin to hold the relay in either the
closed or open state, and railroaders refer to spiking a track
switch so that it cannot be moved. In programming environments it
normally refers to a temporary change, usually for testing purposes
(as opposed to a permanent change, which would be called

               hardwired
).

spin vi. Equivalent to
               buzz
               . More common among C and
   Unix programmers.

spl /S-P-L/ [abbrev, from Set Priority Level] The way
   traditional Unix kernels implement mutual exclusion by running code
   at high interrupt levels. Used in jargon to describe the act of
   tuning in or tuning out ordinary communication. Classically, spl
   levels run from 1 to 7; "Fred's at spl 6 today" would mean that
   he is very hard to interrupt. "Wait till I finish this; I'll spl
   down then." See also
               interrupts locked out
               .

splash screen n. [Mac users] Syn.
               banner
               , sense 3.

splat n. 1. Name used in many places (DEC, IBM, and others)
   for the asterisk ('*') character (ASCII 0101010). This may
   derive from the 'squashed-bug' appearance of the asterisk on many
   early line printers. 2. [MIT] Name used by some people for the
   '#' character (ASCII 0100011). 3. [Rochester Institute of
   Technology] The
               feature key
                on a Mac (same as
               alt
               , sense
   2). 4. obs. Name used by some people for the Stanford/ITS extended
   ASCII
   circle-x
   character. This character is also called 'blobby' and 'frob',
   among other names; it is sometimes used by mathematicians as a
   notation for 'tensor product'. 5. obs. Name for the
   semi-mythical Stanford extended ASCII
   circle-plus
   character. See also
               ASCII
               .

spod n. [UK] A lower form of life found on
               talker system
               s
   and
               MUD
               s. The spod has few friends in
               RL

                        and
   uses talkers instead, finding communication easier and preferable
   over the net. He has all the negative traits of the
                  computer geek
                     without having any interest in computers per se. Lacking any
   knowledge of or interest in how networks work, and considering his
   access a God-given right, he is a major irritant to sysadmins,
   clogging up lines in order to reach new MUDs, following passed-on
   instructions on how to sneak his way onto Internet ("Wow! It's in
   America!") and complaining when he is not allowed to use busy
   routes. A true spod will start any conversation with "Are you
   male or female?" (and follow it up with "Got any good
   numbers/IDs/passwords?") and will not talk to someone physically
   present in the same terminal room until they log onto the same
   machine that he is using and enter talk mode. Compare
                  newbie
                  ,

                  tourist
                  ,
                  weenie
                  ,
                  twink
                  ,
                  terminal junkie
                  .

spoiler n. [Usenet] 1. A remark which reveals
   important plot elements from books or movies, thus denying the
   reader (of the article) the proper suspense when reading the book
   or watching the movie. 2. Any remark which telegraphs the solution
   of a problem or puzzle, thus denying the reader the pleasure of
   working out the correct answer (see also
                  interesting
). Either
   sense readily forms compounds like 'total spoiler',
   'quasi-spoiler' and even 'pseudo-spoiler'.

   By convention, articles which are spoilers in either sense should
   contain the word 'spoiler' in the Subject: line, or guarantee via
   various tricks that the answer appears only after several
   screens-full of warning, or conceal the sensitive information via

                  rot13
                  , or some combination of these techniques.

sponge n.   [Unix] A special case of a
                  filter
                   that reads its
   entire input before writing any output; the canonical example is a
   sort utility. Unlike most filters, a sponge can conveniently
   overwrite the input file with the output data stream. If a file
   system has versioning (as ITS did and VMS does now) the
   sponge/filter distinction loses its usefulness, because directing
   filter output would just write a new version. See also
                  slurp
                  .

spool vi. [from early IBM 'Simultaneous Peripheral
   Operation On-Line', but this acronym is widely thought to have been
   contrived for effect] To send files to some device or program (a
   'spooler') that queues them up and does something useful with
   them later. Without qualification, the spooler is the 'print
   spooler' controlling output of jobs to a printer; but the term has
   been used in connection with other peripherals (especially plotters
   and graphics devices) and occasionally even for input devices. See
   also
                demon
                .

spool file n. Any file to which data is
                spool
                ed to
   await the next stage of processing. Especially used in
   circumstances where spooling the data copes with a mismatch between
   speeds in two devices or pieces of software. For example, when you
   send mail under Unix, it's typically copied to a spool file to
   await a transport
                demon
                's attentions. This is borderline
   techspeak.

square tape n. Mainframe magnetic tape cartridges for use
   with IBM 3480 or compatible tape drives; or QIC tapes used on
   workstations and micros. The term comes from the square (actually
   rectangular) shape of the cartridges; contrast
                round tape
                .

squirrelcide n. [common on Usenet's comp.risks
   newsgroup] (alt 'squirrelicide') What all too frequently happens
   when a squirrel decides to exercise its species's unfortunate
   penchant for shorting out power lines with their little furry
   bodies. Result; one dead squirrel, one down computer installation.
   In this situation, the computer system is said to have been
   squirrelcided.

stack n. The set of things a person has to do in the
   future. One speaks of the next project to be attacked as having
   risen to the top of the stack. "I'm afraid I've got real work to
   do, so this'll have to be pushed way down on my stack." "I
   haven't done it yet because every time I pop my stack something new
   gets pushed." If you are interrupted several times in the middle
   of a conversation, "My stack overflowed" means "I forget what we
   were talking about." The implication is that more items were
   pushed onto the stack than could be remembered, so the least recent
   items were lost. The usual physical example of a stack is to be
   found in a cafeteria: a pile of plates or trays sitting on a spring
   in a well, so that when you put one on the top they all sink down,
   and when you take one off the top the rest spring up a bit. See
   also
                push
                 and
                pop

.

    At MIT,
                    pdl
                     used to be a more common synonym for
                    stack
                     in
    all these contexts, and this may still be true. Everywhere else

                    stack
                     seems to be the preferred term.
                    Knuth
                        ("The Art of Computer Programming", second edition, vol. 1,
    p. 236) says:

        Many people who realized the importance of stacks and queues
        independently have given other names to these structures:
        stacks have been called push-down lists, reversion storages,
        cellars, nesting stores, piles, last-in-first-out ("LIFO")
        lists, and even yo-yo lists!

stack puke n. Some processor architectures are said to
    'puke their guts onto the stack' to save their internal state
    during exception processing. The Motorola 68020, for example,
    regurgitates up to 92 bytes on a bus fault. On a pipelined
    machine, this can take a while.

stale pointer bug n. Synonym for
                    aliasing bug
                     used
    esp. among microcomputer hackers.

star out v,   [University of York, England] To replace a
    user's encrypted password in /etc/passwd with a single
    asterisk. Under Unix this is not a legal encryption of any
    password; hence the user is not permitted to log in. In general,
    accounts like adm, news, and daemon are permanently "starred
    out"; occasionally a real user might have the this inflicted upon
    him/her as a punishment, e.g. "Graham was starred out for playing
    Omega in working hours". Also occasionally known as The Order Of
    The Gold Star in this context. "Don't do that, or you'll be
    awarded the Order of the Gold Star..." Compare
                    disusered
                    .

state n. 1. Condition, situation. "What's the state of
    your latest hack?" "It's winning away." "The system tried to
    read and write the disk simultaneously and got into a totally

                    wedged
                     state." The standard question "What's your state?"
    means "What are you doing?" or "What are you about to do?"
    Typical answers are "about to gronk out", or "hungry". Another
    standard question is "What's the state of the world?", meaning
    "What's new?" or "What's going on?". The more terse and
    humorous way of asking these questions would be "State-p?".
    Another way of phrasing the first question under sense 1 would be

"state-p latest hack?". 2. Information being maintained in
non-permanent memory (electronic or human).

stealth manager n.   [Corporate DP] A manager that appears
out of nowhere, promises undeliverable software to unknown end
users, and vanishes before the programming staff realizes what has
happened. See
                smoke and mirrors
                .

steam-powered adj. Old-fashioned or underpowered; archaic.
This term does not have a strong negative loading and may even be
used semi-affectionately for something that clanks and wheezes a
lot but hangs in there doing the job.

stiffy n.   [University of Lowell, Massachusetts.] 3.5-inch

                microfloppies
                , so called because their jackets are more rigid
than those of the 5.25-inch and the (now totally obsolete) 8-inch
floppy. Elsewhere this might be called a 'firmy'.

stir-fried random n. (alt. 'stir-fried mumble') Term used
for the best dish of many of those hackers who can cook. Consists
of random fresh veggies and meat wokked with random spices. Tasty
and economical. See
                random
                ,
                great-wall
                ,
                ravs
                ,

                laser chicken
                ,
                oriental food
                ; see also
                mumble
                .

stomp on vt. To inadvertently overwrite something
important, usually automatically. "All the work I did this
weekend got stomped on last night by the nightly server script."
Compare
                scribble
                ,
                mangle
                ,
                trash
                ,
                scrog
                ,

                roach
                .

Stone Age n.,adj. 1. In computer folklore, an ill-defined

period from ENIAC (ca. 1943) to the mid-1950s; the great age of
electromechanical
                dinosaur
                s. Sometimes used for the entire
period up to 1960--61 (see
                Iron Age
                ); however, it is funnier
and more descriptive to characterize the latter period in terms of
a 'Bronze Age' era of transistor-logic, pre-ferrite-
                core
                  machines with drum or CRT mass storage (as opposed to just ←
                    mercury
delay lines and/or relays). See also
                Iron Age
                . 2. More
generally, a pejorative for any crufty, ancient piece of hardware
or software technology. Note that this is used even by people who
were there for the
                Stone Age
                  (sense 1).

stone knives and bearskins n. [from the Star Trek Classic
   episode "The City on the Edge of Forever"] A term
   traditionally used to describe (and deprecate) computing
   environments that are grotesquely primitive in light of what is
   known about good ways to design things. As in "Don't get too used
   to the facilities here. Once you leave SAIL it's stone knives and
   bearskins as far as the eye can see". Compare
                steam-powered
                .

stoppage /sto'p*j/ n. Extreme
                lossage
                 that renders
   something (usually something vital) completely unusable. "The
   recent system stoppage was caused by a
                fried
                  transformer."

store n. [prob. from techspeak 'main store'] In some
   varieties of Commonwealth hackish, the preferred synonym for

                core
                . Thus, 'bringing a program into store' means not that
   one is returning shrink-wrapped software but that a program is
   being
                swap
                ped in.

strided /str:'d*d/ adj. [scientific computing] Said of a
   sequence of memory reads and writes to addresses, each of which is
   separated from the last by a constant interval called the 'stride
   length'. These can be a worst-case access pattern for the standard
   memory-caching schemes when the stride length is a multiple of the
   cache line size. Strided references are often generated by loops
   through an array, and (if your data is large enough that
   access-time is significant) it can be worthwhile to tune for better

   locality by inverting double loops or by partially unrolling the
   outer loop of a loop nest. This usage is borderline techspeak; the
   related term 'memory stride' is definitely techspeak.

stroke n. Common name for the slant ('/', ASCII 0101111)
   character. See
                ASCII
                 for other synonyms.

strudel n. Common (spoken) name for the at-sign ('@',
   ASCII 1000000) character. See
                ASCII
                 for other synonyms.

stubroutine /stuhb'roo-teen/ n. [contraction of 'stub
   subroutine'] Tiny, often vacuous placeholder for a subroutine that
   is to be written or fleshed out later.

studly adj. Impressive; powerful. Said of code and designs
   which exhibit both complexity and a virtuoso flair. Has
   connotations similar to
                hairy
                 but is more positive in tone.
   Often in the emphatic 'most studly' or as noun-form
   'studliness'. "Smail 3.0's configuration parser is most
   studly."

studlycaps /stuhd'lee-kaps/ n. A hackish form of
   silliness similar to
                BiCapitalization
                 for trademarks, but
   applied randomly and to arbitrary text rather than to trademarks.
   ThE oRigiN and SigNificaNce of thIs pRacTicE iS oBscuRe.

stunning adj. Mind-bogglingly stupid. Usually used in
   sarcasm. "You want to code *what* in ADA? That's a ...
   stunning idea!"

stupid-sort n. Syn.
                bogo-sort
                .

Stupids n. Term used by
                samurai
                 for the
                suit
                s who
   employ them; succinctly expresses an attitude at least as common,
   though usually better disguised, among other subcultures of
   hackers. There may be intended reference here to an SF story
   originally published in 1952 but much anthologized since, Mark
   Clifton's "Star, Bright". In it, a super-genius child
   classifies humans into a very few 'Brights' like herself, a huge
   majority of 'Stupids', and a minority of 'Tweens', the merely
   ordinary geniuses.

Sturgeon's Law prov. "Ninety percent of everything is

crap". Derived from a quote by science fiction author Theodore
Sturgeon, who once said, "Sure, 90% of science fiction is crud.
That's because 90% of everything is crud." Oddly, when Sturgeon's
Law is cited, the final word is almost invariably changed to
'crap'. Compare

Hanlon's Razor

,

Ninety-Ninety Rule

.
Though this maxim originated in SF fandom, most hackers recognize
it and are all too aware of its truth.

sucking mud [Applied Data Research] adj. (also 'pumping
mud') Crashed or
wedged
. Usually said of a machine that
provides some service to a network, such as a file server. This
Dallas regionalism derives from the East Texas oilfield lament,
"Shut 'er down, Ma, she's a-suckin' mud". Often used as a query.
"We are going to reconfigure the network, are you ready to suck
mud?"

sufficiently small adj. Syn.
suitably small
.

suit n. 1. Ugly and uncomfortable 'business clothing'
often worn by non-hackers. Invariably worn with a 'tie', a
strangulation device that partially cuts off the blood supply to
the brain. It is thought that this explains much about the
behavior of suit-wearers. Compare
droid
. 2. A person who
habitually wears suits, as distinct from a techie or hacker. See

loser

,

burble

,

management

,

Stupids

,

SNAFU principle

, and

brain-damaged
. English, by the way, is relatively kind; our
Moscow correspondent informs us that the corresponding idiom in
Russian hacker jargon is 'sovok', lit. a tool for grabbing garbage.

suitable win n. See
win
.

suitably small adj. [perverted from mathematical jargon]
   An expression used ironically to characterize unquantifiable

behavior that differs from expected or required behavior. For
example, suppose a newly created program came up with a correct
full-screen display, and one publicly exclaimed: "It works!"
Then, if the program dumped core on the first mouse click, one
might add: "Well, for suitably small values of 'works'."
Compare the characterization of pi under

random numbers

.

sun lounge n. [UK] The room where all the Sun workstations live.
The humor in this term comes from the fact that it's also in
mainstream use to describe a solarium, and all those Sun
workstations clustered together give off an amazing amount of heat.

sun-stools n. Unflattering hackerism for SunTools, a pre-X
windowing environment notorious in its day for size, slowness, and
misfeatures.

X

, however, is larger and slower; see

second-system effect

.

sunspots n. 1. Notional cause of an odd error. "Why did
the program suddenly turn the screen blue?" "Sunspots, I
guess." 2. Also the cause of

bit rot

-- from the myth that
sunspots will increase

cosmic rays

, which can flip single bits
in memory. See also

phase of the moon

.

super source quench n. A special packet designed to shut up
an Internet host. The Internet Protocol (IP) has a control message
called Source Quench that asks a host to transmit more slowly on a
particular connection to avoid congestion. It also has a Redirect
control message intended to instruct a host to send certain packets
to a different local router. A "super source quench" is actually
a redirect control packet, forged to look like it came from a local
router, that instructs a host to send all packets to its own local
loopback address. This will effectively tie many Internet hosts up
in knots. Compare

Godzillagram

,

breath-of-life packet

.

superloser n. [Unix] A superuser with no clue -- someone
with root privileges on a Unix system and no idea what he/she is
doing, the moral equivalent of a three-year-old with an unsafetied
Uzi. Anyone who thinks this is an uncommon situation reckons
without the territorial urges of

management

.

superprogrammer n. A prolific programmer; one who can code
   exceedingly well and quickly. Not all hackers are
   superprogrammers, but many are. (Productivity can vary from one
   programmer to another by three orders of magnitude. For example,
   one programmer might be able to write an average of 3 lines of
   working code in one day, while another, with the proper tools,
   might be able to write 3,000. This range is astonishing; it is
   matched in very few other areas of human endeavor.) The term
   'superprogrammer' is more commonly used within such places as IBM
   than in the hacker community. It tends to stress naive measures of
   productivity and to underweight creativity, ingenuity, and getting
   the job *done* -- and to sidestep the question of whether the
   3,000 lines of code do more or less useful work than three lines
   that do the
               Right Thing
               . Hackers tend to prefer the terms

               hacker
                and
               wizard
               .

superuser n.   [Unix] Syn.
               root
               ,
               avatar
               . This usage has
   spread to non-Unix environments; the superuser is any account with
   all
               wheel
                bits on. A more specific term than
               wheel
               .

support n. After-sale handholding; something many software
   vendors promise but few deliver. To hackers, most support people
   are useless -- because by the time a hacker calls support he or
   she will usually know the software and the relevant manuals better
   than the support people (sadly, this is *not* a joke or
   exaggeration). A hacker's idea of 'support' is a
   t^ete-'a-t^ete with the software's designer.

surf v. [from the 'surf' idiom for rapidly flipping TV
   channels] To traverse the Internet in search of interesting stuff,
   used esp. if one is doing so with a World Wide Web browser. It is
   also common to speak of 'surfing in' to a particular resource.

Suzie COBOL /soo'zee koh'bol/ 1. [IBM: prob. from Frank
   Zappa's 'Suzy Creamcheese'] n. A coder straight out of training
   school who knows everything except the value of comments in plain
   English. Also (fashionable among personkind wishing to avoid
   accusations of sexism) 'Sammy Cobol' or (in some non-IBM circles)
   'Cobol Charlie'. 2. [proposed] Meta-name for any
               code grinder
               ,

    analogous to
                J. Random Hacker
                .

swab /swob/ [From the mnemonic for the PDP-11 'SWAp Byte'
   instruction, as immortalized in the 'dd(1)' option
   'conv=swab' (see
                dd
)] 1. vt. To solve the
                NUXI problem
                 by
   swapping bytes in a file. 2. n. The program in V7 Unix
   used to perform this action, or anything functionally equivalent to
   it. See also
                big-endian
                ,
                little-endian
                ,

                middle-endian
                ,
                bytesexual
                .

swap vt. 1. [techspeak] To move information from a
   fast-access memory to a slow-access memory ('swap out'), or vice
   versa ('swap in'). Often refers specifically to the use of disks
   as 'virtual memory'. As pieces of data or program are needed,
   they are swapped into
                core
                 for processing; when they are no
   longer needed they may be swapped out again. 2. The jargon use of
   these terms analogizes people's short-term memories with core.
   Cramming for an exam might be spoken of as swapping in. If you
   temporarily forget someone's name, but then remember it, your
   excuse is that it was swapped out. To 'keep something swapped
   in' means to keep it fresh in your memory: "I reread the TECO
   manual every few months to keep it swapped in." If someone
   interrupts you just as you got a good idea, you might say "Wait a
   moment while I swap this out", implying that a piece of paper is
   your extra-somatic memory and that if you don't swap the idea out
   by writing it down it will get overwritten and lost as you talk.
   Compare
                page in
                ,
                page out
                .

swap space n. Storage space, especially temporary storage
   space used during a move or reconfiguration. "I'm just using that
   corner of the machine room for swap space."

swapped in n. See
                swap
                . See also
                page in
                .

swapped out n.   See
                 swap
                 . See also
                 page out
                 .

swizzle v.   To convert external names, array indices, or
   references within a data structure into address pointers when the
   data structure is brought into main memory from external storage
   (also called 'pointer swizzling'); this may be done for speed in
   chasing references or to simplify code (e.g., by turning lots of
   name lookups into pointer dereferences). The converse operation is
   sometimes termed 'unswizzling'. See also
                 snap
                 .

sync /sink/ n., vi.   (var. 'synch') 1. To synchronize,
   to bring into synchronization. 2. [techspeak] To force all pending
   I/O to the disk; see
                 flush
                 , sense 2. 3. More generally, to
   force a number of competing processes or agents to a state that
   would be 'safe' if the system were to crash; thus, to checkpoint
   (in the database-theory sense).

syntactic salt n.   The opposite of
                 syntactic sugar
                 , a
   feature designed to make it harder to write bad code.
   Specifically, syntactic salt is a hoop the programmer must jump
   through just to prove that he knows what's going on, rather than to
   express a program action. Some programmers consider required type
   declarations to be syntactic salt. A requirement to write
   'end if', 'end while', 'end do', etc. to terminate
   the last block controlled by a control construct (as opposed to
   just 'end') would definitely be syntactic salt. Syntactic
   salt is like the real thing in that it tends to raise hackers'
   blood pressures in an unhealthy way. Compare
                 candygrammar
                 . .

syntactic sugar n.   [coined by Peter Landin] Features added
   to a language or other formalism to make it 'sweeter' for
   humans, features which do not affect the expressiveness of the
   formalism (compare
                 chrome
). Used esp. when there is an
   obvious and trivial translation of the 'sugar' feature into
   other constructs already present in the notation. C's 'a[i]'
   notation is syntactic sugar for '*(a + i)'. "Syntactic sugar
   causes cancer of the semicolon." -- Alan Perlis.

   The variants 'syntactic saccharin' and 'syntactic syrup' are
   also recorded. These denote something even more gratuitous, in
   that syntactic sugar serves a purpose (making something more
   acceptable to humans), but syntactic saccharin or syrup serve no

purpose at all. Compare
                candygrammar
                ,
                syntactic salt
                .

sys-frog /sis'frog/ n. [the PLATO system] Playful variant
   of 'sysprog', which is in turn short for 'systems programmer'.

sysadmin /sis'ad-min/ n. Common contraction of 'system
   admin'; see
                admin
                .

sysape /sys'ayp/ n. A rather derogatory term for a
   computer operator; a play on
                sysop
                 common at sites that use
   the banana hierarchy of problem complexity (see

                one-banana problem
).

sysop /sis'op/ n. [esp. in the BBS world] The operator
   (and usually the owner) of a bulletin-board system. A common
   neophyte mistake on
                FidoNet
                 is to address a message to
   'sysop' in an international
                echo
                , thus sending it to
   hundreds of sysops around the world.

system n. 1. The supervisor program or OS on a computer.
   2. The entire computer system, including input/output devices, the
   supervisor program or OS, and possibly other software. 3. Any
   large-scale program. 4. Any method or algorithm. 5. 'System
   hacker': one who hacks the system (in senses 1 and 2 only; for
   sense 3 one mentions the particular program: e.g., 'LISP hacker')

systems jock n. See
                jock
                , sense 2.

system mangler n. Humorous synonym for 'system manager',
   poss. from the fact that one major IBM OS had a
                root
                 account
   called SYSMANGR. Refers specifically to a systems programmer in
   charge of administration, software maintenance, and updates at some
   site. Unlike
                admin
                , this term emphasizes the technical end of
   the skills involved.

SysVile /sis-vi:l'/ n. See
                Missed'em-five

.

1.25 T

             T /T/ 1. [from LISP terminology for 'true'] Yes. Used
in reply to a question (particularly one asked using

             The '-P' convention
). In LISP, the constant T means 'true', among
other things. Some hackers use 'T' and 'NIL' instead of 'Yes' and
'No' almost reflexively. This sometimes causes misunderstandings.
When a waiter or flight attendant asks whether a hacker wants
coffee, he may well respond 'T', meaning that he wants coffee; but
of course he will be brought a cup of tea instead. As it happens,
most hackers (particularly those who frequent Chinese restaurants)
like tea at least as well as coffee -- so it is not that big a
problem. 2. See
             time T
              (also
             since time T equals minus infinity
).
3. [techspeak] In transaction-processing circles, an abbreviation
for the noun 'transaction'. 4. [Purdue] Alternate spelling of

             tee
             . 5. A dialect of
             LISP
              developed at Yale.

tail recursion n. If you aren't sick of it already, see

             tail recursion
             .

talk mode n. A feature supported by Unix, ITS, and some
   other OSes that allows two or more logged-in users to set up a
   real-time on-line conversation. It combines the immediacy of
   talking with all the precision (and verbosity) that written
   language entails. It is difficult to communicate inflection,
   though conventions have arisen for some of these (see the section
   on writing style in the Prependices for details).

   Talk mode has a special set of jargon words, used to save typing,
   which are not used orally. Some of these are identical to (and
   probably derived from) Morse-code jargon used by ham-radio amateurs
   since the 1920s.

     AFAIK
        as far as I know
     BCNU
        be seeing you
     BTW
        by the way
     BYE?

```
      are you ready to unlink?  (this is the standard way to end a
      talk-mode conversation; the other person types 'BYE' to
      confirm, or else continues the conversation)
CUL
      see you later
ENQ?
      are you busy?  (expects 'ACK' or 'NAK' in return)
FOO?
      are you there? (often used on unexpected links, meaning also
      "Sorry if I butted in ..." (linker) or "What's up?"
      (linkee))
FWIW
      for what it's worth
FYI
      for your information
FYA
      for your amusement
GA
      go ahead (used when two people have tried to type
      simultaneously; this cedes the right to type to the other)
GRMBL
      grumble (expresses disquiet or disagreement)
HELLOP
      hello? (an instance of the '-P' convention)
JAM
      just a minute (equivalent to 'SEC....')
MIN
      same as 'JAM'
NIL
      no (see
            NIL
            )
O
      over to you
OO
      over and out
/
      another form of "over to you" (from x/y as "x over y")
\
      lambda (used in discussing LISPy things)
OBTW
      oh, by the way
OTOH
      on the other hand
R U THERE?
      are you there?
SEC
      wait a second (sometimes written 'SEC...')
T
      yes (see the main entry for
            T
            )
TNX
      thanks
TNX 1.0E6
      thanks a million (humorous)
TNXE6
```

```
       another form of "thanks a million"
WRT
       with regard to, or with respect to.
WTF
       the universal interrogative particle; WTF knows what it
       means?
WTH
       what the hell?
<double newline>
       When the typing party has finished, he/she types two
       newlines to signal that he/she is done; this leaves a blank
       line between 'speeches' in the conversation, making it
       easier to reread the preceding text.
<name>:
       When three or more terminals are linked, it is conventional
       for each typist to
            prepend
             his/her login name or handle
       and a colon (or a hyphen) to each line to indicate who is
       typing (some conferencing facilities do this automatically).
       The login name is often shortened to a unique prefix
       (possibly a single letter) during a very long conversation.
  /\/\/\
       A giggle or chuckle.  On a MUD, this usually means
       'earthquake fault'.
```

Most of the above sub-jargon is used at both Stanford and MIT.
Several of these expressions are also common in
            email
            , esp.
FYI, FYA, BTW, BCNU, WTF, and CUL. A few other abbreviations have
been reported from commercial networks, such as GEnie and
CompuServe, where on-line 'live' chat including more than two
people is common and usually involves a more 'social' context,
notably the following:

```
  <g>
       grin
  <gr&d>
       grinning, running, and ducking
  BBL
       be back later
  BRB
       be right back
  HHOJ
       ha ha only joking
  HHOK
       ha ha only kidding
  HHOS

            ha ha only serious
                 IMHO
       in my humble opinion (see
            IMHO
            )
  LOL
       laughing out loud
```

```
    NHOH
          Never Heard of Him/Her (often used in
                initgame
                )
    ROTF
          rolling on the floor
    ROTFL
          rolling on the floor laughing
    AFK
          away from keyboard
    b4
          before
    CU l8tr
          see you later
    MORF
          male or female?
    TTFN
          ta-ta for now
    TTYL
          talk to you later
    OIC
          oh, I see
    rehi
          hello again
```

Most of these are not used at universities or in the Unix world,
though ROTF and TTFN have gained some currency there and IMHO is
common; conversely, most of the people who know these are
unfamiliar with FOO?, BCNU, HELLOP,
                NIL
                , and
                T
                .

The
                MUD
                 community uses a mixture of Usenet/Internet emoticons,
a few of the more natural of the old-style talk-mode abbrevs, and
some of the 'social' list above; specifically, MUD respondents
report use of BBL, BRB, LOL, b4, BTW, WTF, TTFN, and WTH. The use
of 'rehi' is also common; in fact, mudders are fond of re-
compounds and will frequently 'rehug' or 'rebonk' (see

                bonk/oif
) people. The word 're' by itself is taken as
'regreet'. In general, though, MUDders express a preference for
typing things out in full rather than using abbreviations; this may
be due to the relative youth of the MUD cultures, which tend to
include many touch typists and to assume high-speed links. The
following uses specific to MUDs are reported:

```
    CU l8er
          see you later (mutant of 'CU l8tr')
    FOAD
          fuck off and die (use of this is generally OTT)
    OTT
          over the top (excessive, uncalled for)
```

```
    ppl
        abbrev for "people"
    THX
        thanks (mutant of 'TNX'; clearly this comes in batches of
        1138 (the Lucasian K)).
    UOK?
        are you OK?
```

   Some

                B1FF

                isms (notably the variant spelling 'd00d')
   appear to be passing into wider use among some subgroups of
   MUDders.

   One final note on talk mode style: neophytes, when in talk mode,
   often seem to think they must produce letter-perfect prose because
   they are typing rather than speaking. This is not the best
   approach. It can be very frustrating to wait while your partner
   pauses to think of a word, or repeatedly makes the same spelling
   error and backs up to fix it. It is usually best just to leave
   typographical errors behind and plunge forward, unless severe
   confusion may result; in that case it is often fastest just to type
   "xxx" and start over from before the mistake.

   See also

                hakspek

                ,
                emoticon

                .

talker system n. British hackerism for software that
   enables real-time chat or

                talk mode

                .

tall card n. A PC/AT-size expansion card (these can be
   larger than IBM PC or XT cards because the AT case is bigger). See
   also

                short card

                . When IBM introduced the PS/2 model 30 (its
   last gasp at supporting the ISA) they made the case lower and many
   industry-standard tall cards wouldn't fit; this was felt to be a
   reincarnation of the

                connector conspiracy

                , done with less
   style.

tanked adj. Same as

                down

                , used primarily by Unix
   hackers. See also

                hosed

                . Popularized as a synonym for
   'drunk' by Steve Dallas in the late lamented "Bloom County"
   comic strip.

TANSTAAFL /tan'stah-fl/ [acronym, from Robert Heinlein's

```
        classic "The Moon is a Harsh Mistress".]  "There Ain't No
        Such Thing As A Free Lunch", often invoked when someone is balking
        at the prospect of using an unpleasantly
                        heavyweight
                            technique, or at the poor quality of some piece of free  ←
                                software,
        or at the
                        signal-to-noise ratio
                         of unmoderated Usenet
        newsgroups.  "What? Don't tell me I have to implement a database
        back end to get my address book program to work!"  "Well,
        TANSTAAFL you know."  This phrase owes some of its popularity to
        the high concentration of science-fiction fans and political
        libertarians in hackerdom (see
                        A Portrait of J. Random Hacker
                         in
        Appendix B).
```

tar and feather vi. [from Unix `tar(1)'] To create a
    transportable archive from a group of files by first sticking them
    together with `tar(1)' (the Tape ARchiver) and then
    compressing the result (see
                    compress
). The latter action is
    dubbed `feathering' partly for euphony and (if only for contrived
    effect) by analogy to what you do with an airplane propeller to
    decrease wind resistance, or with an oar to reduce water
    resistance; smaller files, after all, slip through comm links more
    easily.

taste [primarily MIT] n. 1. The quality in a program that
    tends to be inversely proportional to the number of features,
    hacks, and kluges programmed into it. Also `tasty',
    `tasteful', `tastefulness'. "This feature comes in N
    tasty flavors." Although `tasty' and `flavorful' are
    essentially synonyms, `taste' and
                    flavor
                     are not. Taste
    refers to sound judgment on the part of the creator; a program or
    feature can *exhibit* taste but cannot *have* taste. On
    the other hand, a feature can have
                    flavor
                    . Also,
                    flavor
                        has the additional meaning of `kind' or `variety' not shared by
    `taste'. The marked sense of
                    flavor
                     is more popular than
    `taste', though both are widely used. See also
                    elegant
                    .
    2. Alt. sp. of
                    tayste
                    .

tayste /tayst/ n. Two bits; also as
                    taste

                      .
    Syn.
                  crumb
                  ,
                  quarter
                  . See
                  nybble
                  .

TCB /T-C-B/ n. [IBM] 1. Trouble Came Back. An
    intermittent or difficult-to-reproduce problem that has failed to
    respond to neglect or
                  shotgun debugging
                  . Compare

                  heisenbug
                  . Not to be confused with: 2. Trusted Computing
    Base, an 'official' jargon term from the
                  Orange Book
                  .

TCP/IP // n. 1. [Transmission Control Protocol/Internet
    Protocol] The wide-area-networking protocol that makes the Internet
    work, and the only one most hackers can speak the name of without
    laughing or retching. Unlike such allegedly 'standard' competitors
    such as X.25, DECnet, and the ISO 7-layer stack, TCP/IP evolved
    primarily by actually being *used*, rather than being handed
    down from on high by a vendor or a heavily-politicized standards
    committee. Consequently, it (a) works, (b) actually promotes cheap
    cross-platform connectivity, and (c) annoys the hell out of
    corporate and governmental empire-builders everywhere. Hackers
    value all three of these properties. See
                  creationism
                  . 2.
    [Amateur Packet Radio] Sometimes expanded as "The Crap Phil Is
    Pushing". The reference is to Phil Karn, KA9NQ, and the context
    is an ongoing technical/political war between the majority of sites
    still running AX.25 and a growing minority of TCP/IP
    relays.

tea, ISO standard cup of n. [South Africa] A cup of tea
    with milk and one teaspoon of sugar, where the milk is poured into
    the cup before the tea. Variations are ISO 0, with no sugar; ISO
    2, with two spoons of sugar; and so on.

    Like many ISO standards, this one has a faintly alien ring in North
    America, where hackers generally shun the decadent British practice
    of adulterating perfectly good tea with dairy products and
    prefer instead to add a wedge of lemon, if anything. If one were
    feeling extremely silly, one might hypothesize an analogous 'ANSI
    standard cup of tea' and wind up with a political situation
    distressingly similar to several that arise in much more serious
    technical contexts. Milk and lemon don't mix very well.

TechRef /tek'ref/ n. [MS-DOS] The original "IBM PC
    Technical Reference Manual", including the BIOS listing and
    complete schematics for the PC. The only PC documentation in the

original-issue package that was considered serious by real
hackers.

TECO /tee'koh/ n.,v.,obs. 1. [originally an acronym for
'[paper] Tape Editor and COrrector'; later, 'Text Editor and
COrrector'] n. A text editor developed at MIT and modified by just
about everybody. With all the dialects included, TECO may have
been the most prolific editor in use before
                EMACS
                , to which it
was directly ancestral. Noted for its powerful
programming-language-like features and its unspeakably hairy
syntax. It is literally the case that every string of characters
is a valid TECO program (though probably not a useful one); one
common game used to be mentally working out what the TECO commands
corresponding to human names did. 2. vt. Originally, to edit using
the TECO editor in one of its infinite variations (see below).
3. vt.,obs. To edit even when TECO is *not* the editor being
used! This usage is rare and now primarily historical.

As an example of TECO's obscurity, here is a TECO program that
takes a list of names such as:

  Loser, J. Random
  Quux, The Great
  Dick, Moby

sorts them alphabetically according to surname, and then puts the
surname last, removing the comma, to produce the following:

  Moby Dick
  J. Random Loser
  The Great Quux

The program is

  [1 J^P$L$$
  J <.-Z; .,(S,$ -D .)FX1 @F^B $K :L I $ G1 L>$$

(where ^B means 'Control-B' (ASCII 0000010) and $ is actually
an
                alt
                 or escape (ASCII 0011011) character).

In fact, this very program was used to produce the second, sorted
list from the first list. The first hack at it had a
                bug
                : GLS
(the author) had accidentally omitted the '@' in front
of 'F^B', which as anyone can see is clearly the
                Wrong Thing
                . It
worked fine the second time. There is no space to describe all the
features of TECO, but it may be of interest that '^P' means
'sort' and 'J<.-Z; ... L>' is an idiomatic series of commands
for 'do once for every line'.

In mid-1991, TECO is pretty much one with the dust of history,
having been replaced in the affections of hackerdom by

                EMACS
                .
Descendants of an early (and somewhat lobotomized) version adopted
by DEC can still be found lurking on VMS and a couple of crufty
PDP-11 operating systems, however, and ports of the more advanced
MIT versions remain the focus of some antiquarian interest. See
also

                retrocomputing
                ,
                write-only language
                .

tee n.,vt. [Purdue] A carbon copy of an electronic
   transmission. "Oh, you're sending him the
                bits
                 to that?
   Slap on a tee for me." From the Unix command 'tee(1)',
   itself named after a pipe fitting (see
                plumbing
). Can also
   mean 'save one for me', as in "Tee a slice for me!" Also
   spelled 'T'.

teledildonics /tel'*-dil-do'-niks/ n. Sex in a computer
   simulated virtual reality, esp. computer-mediated sexual
   interaction between the
                VR
                 presences of two humans. This
   practice is not yet possible except in the rather limited form of
   erotic conversation on
                MUD
                s and the like. The term, however,
   is widely recognized in the VR community as a
                ha ha only serious
                   projection of things to come. "When we can sustain a multi- ←
                      sensory
   surround good enough for teledildonics, *then* we'll know we're
   getting somewhere." See also
                hot chat
                .

Telerat /tel'*-rat/ n. Unflattering hackerism for
   'Teleray', a line of extremely losing terminals. Compare

                AIDX
                ,
                Macintrash

                Nominal Semidestructor
                ,
                Open DeathTrap
                ,

                ScumOS

                    ,
                    sun-stools

                    ,
                    HP-SUX

                    .

TELNET /tel'net/ vt. (also commonly lowercased as
    'telnet') To communicate with another Internet host using the
    TELNET (
                    RFC

                     854) protocol (usually using a program of the same
    name). TOPS-10 people used the word IMPCOM, since that was the
    program name for them. Sometimes abbreviated to TN /T-N/. "I
    usually TN over to SAIL just to read the AP News."

ten-finger interface n. The interface between two networks
    that cannot be directly connected for security reasons; refers to
    the practice of placing two terminals side by side and having an
    operator read from one and type into the other.

tense adj. Of programs, very clever and efficient. A tense
    piece of code often got that way because it was highly
                    bum
                    med,
    but sometimes it was just based on a great idea. A comment in a
    clever routine by Mike Kazar, once a grad-student hacker at CMU:
    "This routine is so tense it will bring tears to your eyes." A
    tense programmer is one who produces tense code.

tentacle n. A covert
                    pseudo
                    , sense 1. An artificial
    identity created in cyberspace for nefarious and deceptive
    purposes. The implication is that a single person may have
multiple
    tentacles. This term was originally floated in some paranoid
    ravings on the cypherpunks list (see
                    cypherpunk
                    , and adopted
    in a spirit of irony by other members. It has since shown up, used
    seriously, in the documentation for some remailer software, and is
    now (1994) widely recognized on the net.

tenured graduate student n. One who has been in graduate
    school for 10 years (the usual maximum is 5 or 6): a 'ten-yeared'
    student (get it?). Actually, this term may be used of any grad
    student beginning in his seventh year. Students don't really get
    tenure, of course, the way professors do, but a tenth-year graduate
    student has probably been around the university longer than any
    untenured professor.

tera- /te'r*/ pref. [SI] See
                    quantifiers
                    .

teraflop club /te'r*-flop kluhb/ n. [FLOP = Floating
    Point Operation] A mythical association of people who consume

    outrageous amounts of computer time in order to produce a few
    simple pictures of glass balls with intricate ray-tracing
    techniques. Caltech professor James Kajiya is said to have been
    the founder. Compare
                 Knights of the Lambda Calculus
                 .

terminak /ter'mi-nak'/ n. [Caltech, ca. 1979] Any
    malfunctioning computer terminal. A common failure mode of
    Lear-Siegler ADM 3a terminals caused the 'L' key to produce the 'K'
    code instead; complaints about this tended to look like "Terminak
    #3 has a bad keyboard. Pkease fix." See
                 AIDX
                 ,

                 Nominal Semidestructor
                 ,
                 Open DeathTrap
                 ,
                 ScumOS
                 ,
                 sun-stools
                 ,

                 Telerat
                 ,
                 HP-SUX
                 .

terminal brain death n. The extreme form of
                 terminal illness
                    (sense 1). What someone who has obviously been hacking
    continuously for far too long is said to be suffering from.

terminal illness n. 1. Syn.
                 raster burn
                 . 2. The
    'burn-in' condition your CRT tends to get if you don't have a
    screen saver.

terminal junkie n. [UK] A
                 wannabee
                  or early
                 larval stage
                    hacker who spends most of his or her time wandering the
    directory tree and writing
                 noddy
                  programs just to get a fix of
    computer time. Variants include 'terminal jockey', 'console
    junkie', and
                 console jockey
                 . The term 'console jockey'
    seems to imply more expertise than the other three (possibly
    because of the exalted status of the
                 console
                  relative to an
    ordinary terminal). See also

```
                    twink
                    ,
                    read-only user
                    .
```

terpri /ter'pree/ vi. [from LISP 1.5 (and later,
   MacLISP)] To output a
```
                    newline
```
                    . Now rare as jargon, though
   still used as techspeak in Common LISP. It is a contraction of
   'TERminate PRInt line', named for the fact that, on some early OSes
   and hardware, no characters would be printed until a complete line
   was formed, so this operation terminated the line and emitted the
   output.

test n. 1. Real users bashing on a prototype long enough to
   get thoroughly acquainted with it, with careful monitoring and
   followup of the results. 2. Some bored random user trying a couple
   of the simpler features with a developer looking over his or her
   shoulder, ready to pounce on mistakes. Judging by the quality of
   most software, the second definition is far more prevalent. See
   also
```
                    demo
                    .
```

TeX /tekh/ n.
   An extremely powerful
```
                    macro
```
                    -based text formatter written by
   Donald E.
```
                    Knuth
```
                    , very popular in the computer-science
   community (it is good enough to have displaced Unix
```
                    troff
```
                    , the
   other favored formatter, even at many Unix installations). TeX
   fans insist on the correct (guttural) pronunciation, and the
   correct spelling (all caps, squished together, with the E depressed
   below the baseline; the mixed-case 'TeX' is considered an
   acceptable kluge on ASCII-only devices). Fans like to proliferate
   names from the word 'TeX' -- such as TeXnician (TeX
   user), TeXhacker (TeX programmer), TeXmaster (competent
   TeX programmer), TeXhax, and TeXnique. See also

```
                    CrApTeX
                    .
```

   Knuth began TeX because he had become annoyed at the declining
   quality of the typesetting in volumes I--III of his monumental
   "Art of Computer Programming" (see
```
                    Knuth
                    , also
```
```
                    bible
```
). In a manifestation of the typical hackish urge to
   solve the problem at hand once and for all, he began to design his
   own typesetting language. He thought he would finish it on his

sabbatical in 1978; he was wrong by only about 8 years. The
language was finally frozen around 1985, but volume IV of "The
Art of Computer Programming" has yet to appear as of mid-1993. The
impact and influence of TeX's design has been such that nobody
minds this very much. Many grand hackish projects have started as
a bit of
                toolsmith
                ing on the way to something else; Knuth's
diversion was simply on a grander scale than most.

TeX has also been a noteworthy example of free, shared, but
high-quality software. Knuth used to offer monetary awards to
people who found and reported bugs in it; as the years wore on and
the few remaining bugs were fixed (and new ones even harder to
find), the bribe went up. Though well-written, TeX is so large
(and so full of cutting edge technique) that it is said to have
unearthed at least one bug in every Pascal system it has been
compiled with.

text n. 1. [techspeak] Executable code, esp. a 'pure
code' portion shared between multiple instances of a program
running in a multitasking OS. Compare
                English
                . 2. Textual
material in the mainstream sense; data in ordinary
                ASCII
                 or

                EBCDIC
                 representation (see
                flat-ASCII
). "Those are
text files; you can review them using the editor." These two
contradictory senses confuse hackers, too.

thanks in advance [Usenet] Conventional net.politeness
ending a posted request for information or assistance. Sometimes
written 'advTHANKSance' or 'aTdHvAaNnKcSe' or abbreviated 'TIA'.
See
                net.-
                ,
                netiquette
                .

That's not a bug, that's a feature! The
                canonical
                 first parry in a debate about a purported bug. The complainant ←
                 , if
unconvinced, is likely to retort that the bug is then at best a

                misfeature
                . See also
                feature
                .

the X that can be Y is not the true X Yet another instance
of hackerdom's peculiar attraction to mystical references -- a

common humorous way of making exclusive statements about a class of
things. The template is from the "Tao te Ching": "The Tao
which can be spoken of is not the true Tao." The implication is
often that the X is a mystery accessible only to the enlightened.
See the
                trampoline
                 entry for an example, and compare

                has the X nature
                .

theology n. 1. Ironically or humorously used to refer to

                religious issues
                . 2. Technical fine points of an abstruse
    nature, esp. those where the resolution is of theoretical
    interest but is relatively
                marginal
                 with respect to actual use
    of a design or system. Used esp. around software issues with a
    heavy AI or language-design component, such as the smart-data vs.
    smart-programs dispute in AI.

theory n. The consensus, idea, plan, story, or set of rules
    that is currently being used to inform a behavior. This usage is a
    generalization and (deliberate) abuse of the technical meaning.
    "What's the theory on fixing this TECO loss?" "What's the
    theory on dinner tonight?" ("Chinatown, I guess.") "What's
    the current theory on letting lusers on during the day?" "The
    theory behind this change is to fix the following well-known
    screw...."

thinko /thing'koh/ n. [by analogy with 'typo'] A
    momentary, correctable glitch in mental processing, especially one
    involving recall of information learned by rote; a bubble in the
    stream of consciousness. Syn.
                braino
                ; see also
                brain fart
                .
    Compare
                mouso
                .

This can't happen Less clipped variant of
                can't happen
                .

This time, for sure! excl. Ritual affirmation frequently
    uttered during protracted debugging sessions involving numerous
    small obstacles (e.g., attempts to bring up a UUCP connection).
    For the proper effect, this must be uttered in a fruity imitation
    of Bullwinkle J. Moose. Also heard: "Hey, Rocky! Watch me pull a
    rabbit out of my hat!" The
                canonical
                 response is, of course,
    "But that trick *never* works!" See

Humor, Hacker
.

thrash vi. To move wildly or violently, without
   accomplishing anything useful. Paging or swapping systems that are
   overloaded waste most of their time moving data into and out of
   core (rather than performing useful computation) and are therefore
   said to thrash. Someone who keeps changing his mind (esp. about
   what to work on next) is said to be thrashing. A person
   frantically trying to execute too many tasks at once (and not
   spending enough time on any single task) may also be described as
   thrashing. Compare
               multitask
                .

thread n. [Usenet, GEnie, CompuServe] Common abbreviation
   of 'topic thread', a more or less continuous chain of postings on
   a single topic. To 'follow a thread' is to read a series of
   Usenet postings sharing a common subject or (more correctly) which
   are connected by Reference headers. The better newsreaders can
   present news in thread order automatically.

   Interestingly, this is far from a neologism. The OED says:
   "That which connects the successive points in anything, esp. a
   narrative, train of thought, or the like; the sequence of events
   or ideas continuing throughout the whole course of anything;"
   Citations are given going back to 1642!

three-finger salute n. Syn.
               Vulcan nerve pinch
                .

thud n. 1. Yet another
               metasyntactic variable
                (see

               foo
). It is reported that at CMU from the mid-1970s the
   canonical series of these was 'foo', 'bar', 'thud', 'blat'.
   2. Rare term for the hash character, '#' (ASCII 0100011). See

               ASCII
                for other synonyms.

thumb n. The slider on a window-system scrollbar. So
   called because moving it allows you to browse through the contents
   of a text window in a way analogous to thumbing through a book.

thunk /thuhnk/ n. 1. "A piece of coding which provides
   an address", according to P. Z. Ingerman, who invented thunks in
   1961 as a way of binding actual parameters to their formal
   definitions in Algol-60 procedure calls. If a procedure is called
   with an expression in the place of a formal parameter, the compiler
   generates a thunk which computes the expression and leaves the
   address of the result in some standard location. 2. Later
   generalized into: an expression, frozen together with its
   environment, for later evaluation if and when needed (similar to

what in techspeak is called 'closure'). The process of
unfreezing these thunks is called 'forcing'. 3. A
                stubroutine
                , in an overlay programming environment, that loads
and jumps to the correct overlay. Compare
                trampoline
                .
4. People and activities scheduled in a thunklike manner. "It
occurred to me the other day that I am rather accurately modeled by
a thunk -- I frequently need to be forced to completion." ---
paraphrased from a
                plan file
                .

Historical note: There are a couple of onomatopoeic myths
circulating about the origin of this term. The most common is that
it is the sound made by data hitting the stack; another holds that
the sound is that of the data hitting an accumulator. Yet another
suggests that it is the sound of the expression being unfrozen at
argument-evaluation time. In fact, according to the inventors, it
was coined after they realized (in the wee hours after hours of
discussion) that the type of an argument in Algol-60 could be
figured out in advance with a little compile-time thought,
simplifying the evaluation machinery. In other words, it had
'already been thought of'; thus it was christened a 'thunk',
which is "the past tense of 'think' at two in the morning".

tick n. 1. A
                jiffy
                 (sense 1). 2. In simulations, the
discrete unit of time that passes between iterations of the
simulation mechanism. In AI applications, this amount of time is
often left unspecified, since the only constraint of interest is
the ordering of events. This sort of AI simulation is often
pejoratively referred to as 'tick-tick-tick' simulation,
especially when the issue of simultaneity of events with long,
independent chains of causes is
                handwave
                d. 3. In the FORTH
language, a single quote character.

tick-list features n. [Acorn Computers] Features in
   software or hardware that customers insist on but never use
   (calculators in desktop TSRs and that sort of thing). The American
   equivalent would be 'checklist features', but this jargon sense
   of the phrase has not been reported.

tickle a bug vt. To cause a normally hidden bug to manifest
   itself through some known series of inputs or operations. "You
   can tickle the bug in the Paradise VGA card's highlight handling by
   trying to set bright yellow reverse video."

tiger team n. [U.S. military jargon] 1. Originally, a team
   (of
                sneaker
                s) whose purpose is to penetrate security, and thus

test security measures. These people are paid professionals who do
hacker-type tricks, e.g., leave cardboard signs saying "bomb" in
critical defense installations, hand-lettered notes saying "Your
codebooks have been stolen" (they usually haven't been) inside
safes, etc. After a successful penetration, some high-ranking
security type shows up the next morning for a 'security review'
and finds the sign, note, etc., and all hell breaks loose. Serious
successes of tiger teams sometimes lead to early retirement for
base commanders and security officers (see the
                patch
                 entry for
an example). 2. Recently, and more generally, any official
inspection team or special
                firefighting
                 group called in to
look at a problem.

A subset of tiger teams are professional
                cracker
                s, testing the
security of military computer installations by attempting remote
attacks via networks or supposedly 'secure' comm channels. Some of
their escapades, if declassified, would probably rank among the
greatest hacks of all times. The term has been adopted in
commercial computer-security circles in this more specific sense.

time bomb n. A subspecies of
                logic bomb
                 that is
triggered by reaching some preset time, either once or
periodically. There are numerous legends about time bombs set up
by programmers in their employers' machines, to go off if the
programmer is fired or laid off and is not present to perform the
appropriate suppressing action periodically.

Interestingly, the only such incident for which we have been
pointed to documentary evidence took place in the Soviet Union in
1986! A disgruntled programmer at the Volga Automobile Plant
(where the Fiat clones called Ladas were manufactured) planted a
time bomb which, a week after he'd left on vacation, stopped the
entire main assembly line for a day. The case attracted lots of
attention in the Soviet Union because it was the first cracking
case to make it to court there. The perpetrator got a suspended
sentence of 3 years in jail and was barred from future work as a
programmer.

time sink n. [poss. by analogy with 'heat sink' or
   'current sink'] A project that consumes unbounded amounts of
   time.

time T /ti:m T/ n. 1. An unspecified but usually
   well-understood time, often used in conjunction with a later time
   T+1. "We'll meet on campus at time T or at Louie's
   at time T+1" means, in the context of going out for dinner:
   "We can meet on campus and go to Louie's, or we can meet at
   Louie's itself a bit later." (Louie's was a Chinese restaurant in
   Palo Alto that was a favorite with hackers.) Had the number 30

been used instead of the number 1, it would have implied that the
travel time from campus to Louie's is 30 minutes; whatever time
T is (and that hasn't been decided on yet), you can meet
half an hour later at Louie's than you could on campus and end up
eating at the same time. See also

                    since time T equals minus infinity
                        .

times-or-divided-by quant. [by analogy with
    'plus-or-minus'] Term occasionally used when describing the
    uncertainty associated with a scheduling estimate, for either
    humorous or brutally honest effect. For a software project, the
    scheduling uncertainty factor is usually at least 2.

Tinkerbell program n. [Great Britain] A monitoring program
    used to scan incoming network calls and generate alerts when calls
    are received from particular sites, or when logins are attempted
    using certain IDs. Named after 'Project Tinkerbell', an
    experimental phone-tapping program developed by British Telecom in
    the early 1980s.

tip of the ice-cube n.   [IBM] The visible part of
    something small and insignificant. Used as an ironic comment in
    situations where 'tip of the iceberg' might be appropriate if the
    subject were at all important.

tired iron n. [IBM] Hardware that is perfectly functional but far
    enough behind the state of the art to have been superseded by new
    products, presumably with sufficient improvement in bang-per-buck
    that the old stuff is starting to look a bit like a
                    dinosaur
                        .

tits on a keyboard n. Small bumps on certain keycaps to
    keep touch-typists registered (usually on the '5' of a numeric
    keypad, and on the 'F' and 'J' of a
                    QWERTY
                     keyboard;
    but the Mac, perverse as usual, has them on the 'D' and
    'K' keys).

TLA /T-L-A/ n. [Three-Letter Acronym] 1. Self-describing
    abbreviation for a species with which computing terminology is
    infested. 2. Any confusing acronym. Examples include MCA, FTP,
    SNA, CPU, MMU, SCCS, DMU, FPU, NNTP, TLA. People who like this
    looser usage argue that not all TLAs have three letters, just as
    not all four-letter words have four letters. One also hears of
    'ETLA' (Extended Three-Letter Acronym, pronounced /ee tee el
    ay/) being used to describe four-letter acronyms. The term
    'SFLA' (Stupid Four-Letter Acronym) has also been reported. See
    also
                    YABA
                        .

    The self-effacing phrase "TDM TLA" (Too Damn Many...) is
    often used to bemoan the plethora of TLAs in use. In 1989, a

random of the journalistic persuasion asked hacker Paul Boutin
"What do you think will be the biggest problem in computing in
the 90s?" Paul's straight-faced response: "There are only
17,000 three-letter acronyms." (To be exact, there are 26^3
= 17,576.)

TMRC /tmerk'/ n. The Tech Model Railroad Club at MIT, one
of the wellsprings of hacker culture. The 1959 "Dictionary of
the TMRC Language" compiled by Peter Samson included several terms
that became basics of the hackish vocabulary (see esp.

            foo

            ,

            mung
            , and
            frob
).

By 1962, TMRC's legendary layout was already a marvel of complexity
(and has grown in the thirty years since; all the features
described here are still present). The control system alone
featured about 1200 relays. There were
            scram switch
            es located
at numerous places around the room that could be thwacked if
something undesirable was about to occur, such as a train going
full-bore at an obstruction. Another feature of the system was a
digital clock on the dispatch board, which was itself something of
a wonder in those bygone days before cheap LEDS and seven-segment
displays. When someone hit a scram switch the clock stopped and
the display was replaced with the word 'FOO'; at TMRC the scram
switches are therefore called 'foo switches'.

Steven Levy, in his book "Hackers" (see the

            Bibliography
             in Appendix C), gives a stimulating account of
those early years. TMRC's Power and Signals group included most of
the early PDP-1 hackers and the people who later bacame the core of
the MIT AI Lab staff. Thirty years later that connection is still
very much alive, and this lexicon accordingly includes a number of
entries from a recent revision of the TMRC dictionary.

TMRCie /tmerk'ee/, n. [MIT] A denizen of
            TMRC
            .

to a first approximation 1. [techspeak] When one is doing
certain numerical computations, an approximate solution may be
computed by any of several heuristic methods, then refined to a
final value. By using the starting point of a first approximation
of the answer, one can write an algorithm that converges more
quickly to the correct result. 2. In jargon, a preface to any
comment that indicates that the comment is only approximately true.
The remark "To a first approximation, I feel good" might indicate
that deeper questioning would reveal that not all is perfect (e.g.,
a nagging cough still remains after an illness).

to a zeroth approximation [from 'to a first
   approximation'] A *really* sloppy approximation; a wild
   guess. Compare
                  social science number
                  .

toad vt. [MUD] 1. Notionally, to change a
                  MUD
                   player into
   a toad. 2. To permanently and totally exile a player from the MUD.
   A very serious action, which can only be done by a MUD
                  wizard
                  ;
   often involves a lot of debate among the other characters first.
   See also
                  frog
                  ,
                  FOD
                  .

toast 1. n. Any completely inoperable system or component,
   esp. one that has just crashed and burned: "Uh, oh ... I
   think the serial board is toast." 2. vt. To cause a system to
   crash accidentally, especially in a manner that requires manual
   rebooting. "Rick just toasted the
                  firewall machine
                   again."
   Compare
                  fried
                  .

toaster n. 1. The archetypal really stupid application for
   an embedded microprocessor controller; often used in comments that
   imply that a scheme is inappropriate technology (but see

                  elevator controller
). "
                  DWIM
                   for an assembler? That'd
   be as silly as running Unix on your toaster!" 2. A very, very
   dumb computer. "You could run this program on any dumb toaster."
   See
                  bitty box
                  ,
                  Get a real computer!
                  ,
                  toy
                  ,
                  beige toaster
                  .
   3. A Macintosh, esp. the Classic Mac. Some hold that
   this is implied by sense 2. 4. A peripheral device. "I bought my
   box without toasters, but since then I've added two boards and a
   second disk drive."

toeprint n. A

```
                    footprint
                     of especially small size.
```

toggle vt. To change a
```
                    bit
                     from whatever state it is
```
   in to the other state; to change from 1 to 0 or from 0 to 1. This
   comes from 'toggle switches', such as standard light switches,
   though the word 'toggle' actually refers to the mechanism that
   keeps the switch in the position to which it is flipped rather than
   to the fact that the switch has two positions. There are four
   things you can do to a bit: set it (force it to be 1), clear (or
   zero) it, leave it alone, or toggle it. (Mathematically, one would
   say that there are four distinct boolean-valued functions of one
   boolean argument, but saying that is much less fun than talking
   about toggling bits.)

tool 1. n. A program used primarily to create, manipulate,
   modify, or analyze other programs, such as a compiler or an editor
   or a cross-referencing program. Oppose
```
                    app
                    ,
                    operating system
                    .
```
   2. [Unix] An application program with a simple, 'transparent'
   (typically text-stream) interface designed specifically to be used
   in programmed combination with other tools (see
```
                    filter
                    ,

                    plumbing
```
). 3. [MIT: general to students there] vi. To work; to
   study (connotes tedium). The TMRC Dictionary defined this as "to
   set one's brain to the grindstone". See
```
                    hack
```
   . 4. n. [MIT] A
   student who studies too much and hacks too little. (MIT's student
   humor magazine rejoices in the name "Tool and Die".)

toolsmith n. The software equivalent of a tool-and-die
   specialist; one who specializes in making the
```
                    tool
                    s with which
```
   other programmers create applications. Many hackers consider this
   more fun than applications per se; to understand why, see
```

                    uninteresting
```
   . Jon Bentley, in the "Bumper-Sticker Computer
   Science" chapter of his book "More Programming Pearls",
   quotes Dick Sites from DEC as saying "I'd rather write programs to
   write programs than write programs".

topic drift n. Term used on GEnie, Usenet and other
   electronic fora to describe the tendency of a
```
                    thread
                     to drift
```
   away from the original subject of discussion (and thus, from the

Subject header of the originating message), or the results of that
tendency. Often used in gentle reminders that the discussion has
strayed off any useful track. "I think we started with a question
about Niven's last book, but we've ended up discussing the sexual
habits of the common marmoset. Now *that's* topic drift!"

topic group n.   Syn.
                 forum
                 .

TOPS-10 /tops-ten/ n.   DEC's proprietary OS for the
   fabled
                 PDP-10
                  machines, long a favorite of hackers but now
   effectively extinct. A fountain of hacker folklore; see Appendix
   A. See also
                 ITS
                 ,
                 TOPS-20
                 ,
                 TWENEX
                 ,
                 VMS
                 ,

                 operating system
                 . TOPS-10 was sometimes called BOTS-10 (from
   'bottoms-ten') as a comment on the inappropriateness of describing
   it as the top of anything.

TOPS-20 /tops-twen'tee/ n.   See
                 TWENEX
                 .

tourist n. [ITS] A guest on the system, especially one who
   generally logs in over a network from a remote location for

                 comm mode
                 , email, games, and other trivial purposes. One step
   below
                 luser
                 . Hackers often spell this
                 turist
                 , perhaps by
   some sort of tenuous analogy with
                 luser
                  (this also expresses
   the ITS culture's penchant for six-letterisms). Compare

                 twink
                 ,
                 read-only user
                 .

tourist information n. Information in an on-line display
   that is not immediately useful, but contributes to a viewer's
   gestalt of what's going on with the software or hardware behind it.

Whether a given piece of info falls in this category depends partly
on what the user is looking for at any given time. The 'bytes
free' information at the bottom of an MS-DOS 'dir' display is
tourist information; so (most of the time) is the TIME information
in a Unix 'ps(1)' display.

touristic adj. Having the quality of a
                tourist
                . Often
used as a pejorative, as in 'losing touristic scum'. Often
spelled 'turistic' or 'turistik', so that phrase might be more
properly rendered 'lusing turistic scum'.

toy n. A computer system; always used with qualifiers.
1. 'nice toy': One that supports the speaker's hacking style
adequately. 2. 'just a toy': A machine that yields insufficient

                computron
                s for the speaker's preferred uses. This is not
condemnatory, as is
                bitty box
                ; toys can at least be fun. It
is also strongly conditioned by one's expectations; Cray XMP users
sometimes consider the Cray-1 a 'toy', and certainly all RISC
boxes and mainframes are toys by their standards. See also

                Get a real computer!
                .

toy language n. A language useful for instructional
purposes or as a proof-of-concept for some aspect of
computer-science theory, but inadequate for general-purpose
programming.
                Bad Thing
                s can result when a toy language is
promoted as a general purpose solution for programming (see

                bondage-and-discipline language
                ); the classic example is

                Pascal
                . Several moderately well-known formalisms for
conceptual tasks such as programming Turing machines also qualify
as toy languages in a less negative sense. See also
                MFTL
                .

toy problem n. [AI] A deliberately oversimplified case of a
challenging problem used to investigate, prototype, or test
algorithms for a real problem. Sometimes used pejoratively. See
also
                gedanken
                ,
                toy program
                .

toy program n. 1. One that can be readily comprehended;

hence, a trivial program (compare
                noddy
). 2. One for which
   the effort of initial coding dominates the costs through its life
   cycle. See also
                noddy
                .

trampoline n. An incredibly
                hairy
                 technique, found in
   some
                HLL
                 and program-overlay implementations (e.g., on the
   Macintosh), that involves on-the-fly generation of small executable
   (and, likely as not, self-modifying) code objects to do indirection
   between code sections. These pieces of
                live data
                 are called
   'trampolines'. Trampolines are notoriously difficult to
   understand in action; in fact, it is said by those who use this
   term that the trampoline that doesn't bend your brain is not the
   true trampoline. See also
                snap
                .

trap 1. n. A program interrupt, usually an interrupt caused
   by some exceptional situation in the user program. In most cases,
   the OS performs some action, then returns control to the program.
   2. vi. To cause a trap. "These instructions trap to the
   monitor." Also used transitively to indicate the cause of the
   trap. "The monitor traps all input/output instructions."

   This term is associated with assembler programming ('interrupt'
   or 'exception' is more common among
                HLL
                 programmers) and
   appears to be fading into history among programmers as the role of
   assembler continues to shrink. However, it is still important to
   computer architects and systems hackers (see
                system
                ,
   sense 1), who use it to distinguish deterministically repeatable
   exceptions from timing-dependent ones (such as I/O interrupts).

trap door n. (alt. 'trapdoor') 1. Syn.
                back door
                 -- a
                Bad Thing
                . 2. [techspeak] A 'trap-door function' is
   one which is easy to compute but very difficult to compute the
   inverse of. Such functions are
                Good Thing
                s with important
   applications in cryptography, specifically in the construction of
   public-key cryptosystems.

trash vt. To destroy the contents of (said of a data
   structure). The most common of the family of near-synonyms
   including
                 mung
                 ,
                 mangle
                 , and
                 scribble
                 .

trawl v. To sift through large volumes of data (e.g.,
   Usenet postings, FTP archives, or the Jargon File) looking for
   something of interest.

tree-killer n. [Sun] 1. A printer. 2. A person who wastes
   paper. This epithet should be interpreted in a broad sense;
   'wasting paper' includes the production of
                 spiffy
                  but

                 content-free
                  documents. Thus, most
                 suit
                 s are
   tree-killers. The negative loading of this term may reflect the
   epithet 'tree-killer' applied by Treebeard the Ent to the Orcs
   in J.R.R. Tolkien's "Lord of the Rings" (see also

                 elvish
                 ,
                 elder days
).

treeware /tree'weir/ n. Printouts, books, and other
   information media made from pulped dead trees. Compare

                 tree-killer
                 , see
                 documentation
                 .

trit /trit/ n. [by analogy with 'bit'] One base-3
   digit; the amount of information conveyed by a selection among one
   of three equally likely outcomes (see also
                 bit
). Trits arise,
   for example, in the context of a
                 flag
                  that should actually be
   able to assume *three* values -- such as yes, no, or unknown.
   Trits are sometimes jokingly called '3-state bits'. A trit may
   be semi-seriously referred to as 'a bit and a half', although it
   is linearly equivalent to 1.5849625 bits (that is,
   log2(3)
   bits).

trivial adj. 1. Too simple to bother detailing. 2. Not

worth the speaker's time. 3. Complex, but solvable by methods so
well known that anyone not utterly
                cretinous
                 would have
thought of them already. 4. Any problem one has already solved
(some claim that hackish 'trivial' usually evaluates to 'I've
seen it before'). Hackers' notions of triviality may be quite at
variance with those of non-hackers. See
                nontrivial
                ,

                uninteresting
                .

troff /T'rof/ or /trof/ n.   [Unix] The gray
    eminence of Unix text processing; a formatting and phototypesetting
    program, written originally in PDP-11 assembler and then in
    barely-structured early C by the late Joseph Ossanna, modeled after
    the earlier ROFF which was in turn modeled after Multics' RUNOFF by
    Jerome Saltzer (*that* name came from the expression "to run
    off a copy"). A companion program,
                nroff
                , formats output for
    terminals and line printers.

    In 1979, Brian Kernighan modified 'troff' so that it could
    drive phototypesetters other than the Graphic Systems CAT. His
    paper describing that work ("A Typesetter-independent troff,"
    AT&T CSTR #97) explains troff's durability. After discussing the
    program's "obvious deficiencies -- a rebarbative input syntax,
    mysterious and undocumented properties in some areas, and a
    voracious appetite for computer resources" and noting the ugliness
    and extreme hairiness of the code and internals, Kernighan
    concludes:

      None of these remarks should be taken as denigrating Ossanna's
      accomplishment with TROFF. It has proven a remarkably robust
      tool, taking unbelievable abuse from a variety of preprocessors
      and being forced into uses that were never conceived of in the
      original design, all with considerable grace under fire.

    The success of
                TeX
                 and desktop publishing systems have
    reduced 'troff''s relative importance, but this tribute
    perfectly captures the strengths that secured 'troff' a place
    in hacker folklore; indeed, it could be taken more generally as an
    indication of those qualities of good programs that, in the long
    run, hackers most admire.

troglodyte n.   [Commodore] 1. A hacker who never leaves his
    cubicle. The term 'Gnoll' (from Dungeons & Dragons) is also
    reported. 2. A curmudgeon attached to an obsolescent computing
    environment. The combination 'ITS troglodyte' was flung around
    some during the Usenet and email wringle-wrangle attending the
    2.x.x revision of the Jargon File; at least one of the people it
    was intended to describe adopted it with pride.

troglodyte mode n.   [Rice University] Programming with the
   lights turned off, sunglasses on, and the terminal inverted (black
   on white) because you've been up for so many days straight that
   your eyes hurt (see
                raster burn
).   Loud music blaring from a
   stereo stacked in the corner is optional but recommended.   See

                larval stage
                ,
                hack mode
                .

Trojan horse n.   [coined by MIT-hacker-turned-NSA-spook Dan
   Edwards] A malicious, security-breaking program that is disguised
   as something benign, such as a directory lister, archiver, game, or
   (in one notorious 1990 case on the Mac) a program to find and
   destroy viruses!   See
                back door
                ,
                virus
                ,
                worm
                ,

                phage
                ,
                mockingbird
                .

troll v.,n.   [From the Usenet group
   alt.folklore.urban] To utter a posting on
                Usenet
                   designed to attract predictable responses or
                flame
                s.   Derives
   from the phrase "trolling for
                newbie
                s" which in turn comes
   from mainstream "trolling", a style of fishing in which one
   trails bait through a likely spot hoping for a bite.   The
   well-constructed troll is a post that induces lots of newbies and
   flamers to make themselves look even more clueless than they
   already do, while subtly conveying to the more savvy and
   experienced that it is in fact a deliberate troll.   If you don't
   fall for the joke, you get to be in on it.

   Some people claim that the troll is properly a narrower category
   than
                flame bait
                , that a troll is categorized by containing
   some assertion that is wrong but not overtly controversial.

tron v.   [NRL, CMU; prob. fr. the movie "Tron"] To
   become inaccessible except via email or `talk(1)', especially
   when one is normally available via telephone or in person.

Frequently used in the past tense, as in: "Ran seems to have
tronned on us this week" or "Gee, Ran, glad you were able to
un-tron yourself". One may also speak of 'tron mode'; compare

             spod
             .

true-hacker n. [analogy with 'trufan' from SF fandom] One
   who exemplifies the primary values of hacker culture, esp.
   competence and helpfulness to other hackers. A high compliment.
   "He spent 6 hours helping me bring up UUCP and netnews on my
   FOOBAR 4000 last week -- manifestly the act of a true-hacker."
   Compare
             demigod
             , oppose
             munchkin
             .

tty /T-T-Y/, /tit'ee/ n. The latter pronunciation was
   primarily ITS, but some Unix people say it this way as well; this
   pronunciation is *not* considered to have sexual
   undertones. 1. A terminal of the teletype variety, characterized by
   a noisy mechanical printer, a very limited character set, and poor
   print quality. Usage: antiquated (like the TTYs themselves). See
   also
             bit-paired keyboard
             . 2. [especially Unix] Any terminal
   at all; sometimes used to refer to the particular terminal
   controlling a given job. 3. [Unix] Any serial port, whether or not
   the device connected to it is a terminal; so called because under
   Unix such devices have names of the form tty*. Ambiguity between
   senses 2 and 3 is common but seldom bothersome.

tube 1. n. A CRT terminal. Never used in the mainstream
   sense of TV; real hackers don't watch TV, except for Loony Toons,
   Rocky & Bullwinkle, Trek Classic, the Simpsons, and the occasional
   cheesy old swashbuckler movie. 2. [IBM] To send a copy of
   something to someone else's terminal. "Tube me that
   note?"

tube time n. Time spent at a terminal or console. More
   inclusive than hacking time; commonly used in discussions of what
   parts of one's environment one uses most heavily. "I find I'm
   spending too much of my tube time reading mail since I started this
   revision."

tunafish n. In hackish lore, refers to the mutated
   punchline of an age-old joke to be found at the bottom of the
   manual pages of 'tunefs(8)' in the original
             BSD
             4.2
   distribution. The joke was removed in later releases once
   commercial sites started using 4.2. Tunefs relates to the
   'tuning' of file-system parameters for optimum performance, and
   at the bottom of a few pages of wizardly inscriptions was a 'BUGS'
   section consisting of the line "You can tune a file system, but
   you can't tunafish". Variants of this can be seen in other BSD

versions, though it has been excised from some versions by
humorless management
              droid
              s. The [nt]roff source for SunOS
4.1.1 contains a comment apparently designed to prevent this:
"Take this out and a Unix Demon will dog your steps from now until
the `time_t''s wrap around."

[It has since been pointed out that indeed you can tunafish.
Usually at a canning factory... --ESR]

tune vt. [from automotive or musical usage] To optimize a
   program or system for a particular environment, esp. by adjusting
   numerical parameters designed as
              hook
              s for tuning, e.g., by
   changing `#define' lines in C.  One may `tune for time'
   (fastest execution), `tune for space' (least memory use), or
   `tune for configuration' (most efficient use of hardware). See

              bum
              ,
              hot spot
              ,
              hand-hacking
              .

turbo nerd n.   See
              computer geek
              .

Turing tar-pit n. 1. A place where anything is possible but
   nothing of interest is practical. Alan Turing helped lay the
   foundations of computer science by showing that all machines and
   languages capable of expressing a certain very primitive set of
   operations are logically equivalent in the kinds of computations
   they can carry out, and in principle have capabilities that differ
   only in speed from those of the most powerful and elegantly
   designed computers. However, no machine or language exactly
   matching Turing's primitive set has ever been built (other than
   possibly as a classroom exercise), because it would be horribly
   slow and far too painful to use. A `Turing tar-pit' is any
   computer language or other tool that shares this property. That
   is, it's theoretically universal -- but in practice, the harder
   you struggle to get any real work done, the deeper its inadequacies
   suck you in. Compare
              bondage-and-discipline language
              . 2. The
   perennial
              holy wars
               over whether language A or B is the "most
   powerful".

turist /too'rist/ n. Var. sp. of
              tourist
              , q.v. Also
   in adjectival form, `turistic'. Poss. influenced by

                luser
                  and 'Turing'.

tweak vt. 1. To change slightly, usually in reference to a
    value. Also used synonymously with
                twiddle
                . If a program is
    almost correct, rather than figure out the precise problem you
    might just keep tweaking it until it works. See
                frobnicate
                  and
                fudge factor
                ; also see
                shotgun debugging
                . 2. To

                tune
                 or
                bum
                 a program; preferred usage in the U.K.

tweeter n.   [University of Waterloo] Syn.
                perf
                ,

                chad
                  (sense 1). This term (like
                woofer
) has been in use
    at Waterloo since 1972 but is elsewhere unknown. In audio jargon,
    the word refers to the treble speaker(s) on a hi-fi.

TWENEX n. /twe'neks/ The TOPS-20 operating system by DEC
    -- the second proprietary OS for the PDP-10 -- preferred by most
    PDP-10 hackers over TOPS-10 (that is, by those who were not

                ITS
                 or
                WAITS
                 partisans). TOPS-20 began in 1969 as Bolt,
    Beranek & Newman's TENEX operating system using special paging
    hardware. By the early 1970s, almost all of the systems on the
    ARPANET ran TENEX. DEC purchased the rights to TENEX from BBN and
    began work to make it their own. The first in-house code name for
    the operating system was VIROS (VIRtual memory Operating System);
    when customers started asking questions, the name was changed to
    SNARK so DEC could truthfully deny that there was any project
    called VIROS. When the name SNARK became known, the name was
    briefly reversed to become KRANS; this was quickly abandoned when
    someone objected that 'krans' meant 'funeral wreath' in Swedish
    (though some Swedish speakers have since said it means simply
    'wreath'; this part of the story may be apocryphal). Ultimately
    DEC picked TOPS-20 as the name of the operating system, and it was
    as TOPS-20 that it was marketed. The hacker community, mindful of
    its origins, quickly dubbed it TWENEX (a contraction of 'twenty
    TENEX'), even though by this point very little of the original
    TENEX code remained (analogously to the differences between AT&T V6

Unix and BSD). DEC people cringed when they heard "TWENEX", but
the term caught on nevertheless (the written abbreviation '20x'
was also used). TWENEX was successful and very popular; in fact,
there was a period in the early 1980s when it commanded as fervent
a culture of partisans as Unix or ITS -- but DEC's decision to
scrap all the internal rivals to the VAX architecture and its
relatively stodgy VMS OS killed the DEC-20 and put a sad end to
TWENEX's brief day in the sun. DEC attempted to convince TOPS-20
users to convert to
                VMS
                , but instead, by the late 1980s, most
of the TOPS-20 hackers had migrated to Unix.

twiddle n. 1. Tilde (ASCII 1111110, '~'). Also called
   'squiggle', 'sqiggle' (sic -- pronounced /skig'l/), and
   'twaddle', but twiddle is the most common term. 2. A small and
   insignificant change to a program. Usually fixes one bug and
   generates several new ones (see also
                shotgun debugging
).
   3. vt. To change something in a small way. Bits, for example, are
   often twiddled. Twiddling a switch or knob implies much less sense
   of purpose than toggling or tweaking it; see
                frobnicate
                . To
   speak of twiddling a bit connotes aimlessness, and at best doesn't
   specify what you're doing to the bit; 'toggling a bit' has a more
   specific meaning (see
                bit twiddling
                ,
                toggle
).

twilight zone n.   [IRC] Notionally, the area of
   cyberspace where
                IRC
                 operators live. An
                op
                 is said to
   have a "connection to the twilight zone".

twink /twink/ n. [UCSC] Equivalent to
                read-only user
                . Also
   reported on the Usenet group soc.motss; may derive
   from gay slang for a cute young thing with nothing upstairs
   (compare mainstream 'chick').

twirling baton n. [PLATO] The overstrike sequence -/|\-/|\-
   which produces an animated twirling baton. If you output it with a
   single backspace between characters, the baton spins in place. If
   you output the sequence BS SP between characters, the baton spins
   from left to right. If you output BS SP BS BS between characters,
   the baton spins from right to left.

   The twirling baton was a popular component of animated signature
   files on the pioneering PLATO educational timesharing system. The

‘archie’ Internet service is perhaps the best-known baton
program today; it uses the twirling baton as an idler indicating
that the program is working on a query.

two pi quant. The number of years it takes to finish one's
thesis. Occurs in stories in the following form: "He started on
his thesis; 2 pi years later..."

two-to-the-N quant. An amount much larger than
                N
                 but
smaller than
                infinity
                . "I have 2-to-the-N things to
do before I can go out for lunch" means you probably won't show
up.

twonkie /twon'kee/ n. The software equivalent of a
Twinkie (a variety of sugar-loaded junk food, or (in gay slang) the
male equivalent of 'chick'); a useless 'feature' added to look
sexy and placate a
                marketroid
                 (compare
                Saturday-night special
).
The term may also be related to "The Twonky", title menace of a
classic SF short story by Lewis Padgett (Henry Kuttner and C. L.
Moore), first published in the September 1942 "Astounding Science
Fiction" and subsequently much anthologized.

1.26 U

                u- pref. Written shorthand for
                micro-
                ; techspeak when
applied to metric units, jargon when used otherwise. Derived from
the Greek letter "mu", the first letter of "micro" (and which
letter looks a lot like the English letter "u").

UBD /U-B-D/ n. [abbreviation for 'User Brain Damage']
An abbreviation used to close out trouble reports obviously due to
utter cluelessness on the user's part. Compare
                pilot error
                ;
oppose
                PBD
                ; see also
                brain-damaged
                .

UN*X n. Used to refer to the Unix operating system (a
trademark of AT&T) in writing, but avoiding the need for the ugly

                (TM)

```
                 typography.
   Also used to refer to any or all varieties of Unixoid operating
   systems.  Ironically, lawyers now say that the requirement for the
   TM-postfix has no legal force, but the asterisk usage is
   entrenched anyhow.  It has been suggested that there may be a
   psychological connection to practice in certain religions
   (especially Judaism) in which the name of the deity is never
   written out in full, e.g., 'YHWH' or 'G--d' is used.  See also

                 glob
                 .
```

undefined external reference excl. [Unix] A message from
   Unix's linker. Used in speech to flag loose ends or dangling
   references in an argument or discussion.

under the hood [hot-rodder talk] 1. Used to introduce the
   underlying implementation of a product (hardware, software, or
   idea). Implies that the implementation is not intuitively obvious
   from the appearance, but the speaker is about to enable the
   listener to
                 grok
                  it. "Let's now look under the hood to see
   how ...." 2. Can also imply that the implementation is much
   simpler than the appearance would indicate: "Under the hood, we
   are just fork/execing the shell." 3. Inside a chassis, as in
   "Under the hood, this baby has a 40MHz 68030!"

undocumented feature n. See
                 feature
                 .

uninteresting adj. 1. Said of a problem that, although

                 nontrivial
                 , can be solved simply by throwing sufficient
   resources at it. 2. Also said of problems for which a solution
   would neither advance the state of the art nor be fun to design and
   code.

   Hackers regard uninteresting problems as intolerable wastes of
   time, to be solved (if at all) by lesser mortals. *Real*
   hackers (see
                 toolsmith
) generalize uninteresting problems
   enough to make them interesting and solve them -- thus solving the
   original problem as a special case (and, it must be admitted,
   occasionally turning a molehill into a mountain, or a mountain into
   a tectonic plate). See
                 WOMBAT
                 ,
                 SMOP
                 ; compare
                 toy problem
                 ,
   oppose
                 interesting

.

Unix /yoo'niks/ n. [In the authors' words, "A weak pun
   on Multics"; very early on it was 'UNICS'] (also 'UNIX') An
   interactive time-sharing system invented in 1969 by Ken Thompson
   after Bell Labs left the Multics project, originally so he could
   play games on his scavenged PDP-7. Dennis Ritchie, the inventor of
   C, is considered a co-author of the system. The turning point in
   Unix's history came when it was reimplemented almost entirely in C
   during 1972--1974, making it the first source-portable OS. Unix
   subsequently underwent mutations and expansions at the hands of
   many different people, resulting in a uniquely flexible and
   developer-friendly environment. By 1991, Unix had become the most
   widely used multiuser general-purpose operating system in the
   world. Many people consider this the most important victory yet of
   hackerdom over industry opposition (but see
                  Unix weenie
                   and

                  Unix conspiracy
                   for an opposing point of view). See

                  Version 7
                  ,
                  BSD
                  ,
                  USG Unix
                  ,
                  Linux
                  .

   Some people are confused over whether this word is appropriately
   'UNIX' or 'Unix'; both forms are common, and used interchangeably.
   Dennis Ritchie says that the 'UNIX' spelling originally happened in
   CACM's 1973 paper because "we had a new typesetter and
                  troff
                     had just been invented and we were intoxicated by being able to
   produce small caps." Later, dmr tried to get the spelling changed
   to 'Unix' in a couple of Bell Labs papers, on the grounds that the
   word is not acronymic. He failed, and eventually (his words)
   "wimped out" on the issue. So both capitalizations are grounded
   in ancient usage; the Jargon File uses 'Unix' in deference to dmr's
   wishes.

Unix brain damage n. Something that has to be done to break
   a network program (typically a mailer) on a non-Unix system so that
   it will interoperate with Unix systems. The hack may qualify as
   'Unix brain damage' if the program conforms to published
   standards and the Unix program in question does not. Unix brain
   damage happens because it is much easier for other (minority)
   systems to change their ways to match non-conforming behavior than
   it is to change all the hundreds of thousands of Unix systems out
   there.

   An example of Unix brain damage is a
                  kluge
                   in a mail server to

recognize bare line feed (the Unix newline) as an equivalent form
to the Internet standard newline, which is a carriage return
followed by a line feed. Such things can make even a hardened

                jock
                 weep.

Unix conspiracy n. [ITS] According to a conspiracy theory
    long popular among
                ITS
                 and
                TOPS-20
                 fans, Unix's growth is
    the result of a plot, hatched during the 1970s at Bell Labs, whose
    intent was to hobble AT&T's competitors by making them dependent
    upon a system whose future evolution was to be under AT&T's
    control. This would be accomplished by disseminating an operating
    system that is apparently inexpensive and easily portable, but also
    relatively unreliable and insecure (so as to require continuing
    upgrades from AT&T). This theory was lent a substantial impetus in
    1984 by the paper referenced in the
                back door
                 entry.

    In this view, Unix was designed to be one of the first computer
    viruses (see
                virus
) -- but a virus spread to computers
    indirectly by people and market forces, rather than directly
    through disks and networks. Adherents of this 'Unix virus' theory
    like to cite the fact that the well-known quotation "Unix is snake
    oil" was uttered by DEC president Kenneth Olsen shortly before DEC
    began actively promoting its own family of Unix workstations.
    (Olsen now claims to have been misquoted.)

Unix weenie n. [ITS] 1. A derogatory play on 'Unix wizard',
    common among hackers who use Unix by necessity but would prefer
    alternatives. The implication is that although the person in
    question may consider mastery of Unix arcana to be a wizardly
    skill, the only real skill involved is the ability to tolerate (and
    the bad taste to wallow in) the incoherence and needless complexity
    that is alleged to infest many Unix programs. "This shell script
    tries to parse its arguments in 69 bletcherous ways. It must have
    been written by a real Unix weenie." 2. A derogatory term for
    anyone who engages in uncritical praise of Unix. Often appearing
    in the context "stupid Unix weenie". See
                Weenix
                 ,
                Unix conspiracy
                 .
    See also
                weenie
                 .

unixism n. A piece of code or a coding technique that
    depends on the protected multi-tasking environment with relatively
    low process-spawn overhead that exists on virtual-memory Unix

```
systems.  Common
            unixism
            s include: gratuitous use of
`fork(2)'; the assumption that certain undocumented but
well-known features of Unix libraries such as `stdio(3)' are
supported elsewhere; reliance on
            obscure
             side-effects of
system calls (use of `sleep(2)' with a 0 argument to clue the
scheduler that you're willing to give up your time-slice, for
example); the assumption that freshly allocated memory is zeroed;
and the assumption that fragmentation problems won't arise from
never `free()'ing memory.  Compare
            vaxocentrism
            ; see also


            New Jersey
            .
```

unswizzle v. See
            swizzle
            .

unwind the stack vi. 1. [techspeak] During the execution of
   a procedural language, one is said to `unwind the stack' from a
   called procedure up to a caller when one discards the stack frame
   and any number of frames above it, popping back up to the level of
   the given caller. In C this is done with
   `longjmp'/`setjmp', in LISP with `throw/catch'.
   See also
            smash the stack
            . 2. People can unwind the stack as
   well, by quickly dealing with a bunch of problems: "Oh heck, let's
   do lunch. Just a second while I unwind my stack."

unwind-protect n. [MIT: from the name of a LISP operator] A
   task you must remember to perform before you leave a place or
   finish a project. "I have an unwind-protect to call my advisor."

up adj. 1. Working, in order. "The down escalator is
   up." Oppose
            down
            . 2. `bring up': vt. To create a working
   version and start it. "They brought up a down system."
   3. `come up' vi. To become ready for production use.

upload /uhp'lohd/ v. 1. [techspeak] To transfer programs
   or data over a digital communications link from a smaller or
   peripheral `client' system to a larger or central `host' one.
   A transfer in the other direction is, of course, called a

            download
             (but see the note about ground-to-space comm under
   that entry). 2. [speculatively] To move the essential patterns and
   algorithms that make up one's mind from one's brain into a
   computer. Those who are convinced that such patterns and
   algorithms capture the complete essence of the self view this

    prospect with pleasant anticipation.

upthread adv. Earlier in the discussion (see
                thread
                ),
   i.e., 'above'. "As Joe pointed out upthread, ..." See
   also
                followup
                .

urchin n. See
                munchkin
                .

URL /U-R-L/ or /erl/ n. Universal Resource Locator, an
   address widget that identifies a document or resource on the
   World-Wide Web. This entry is here primarily to record the fact
   that the term is commonly pronounced both /erl/, and /U-R-L/
   (the latter predominates in more formal contexts).

Usenet /yoos'net/ or /yooz'net/ n. [from 'Users'
   Network'; the original spelling was USENET, but the mixed-case form
   is now widely preferred] A distributed
                bboard
                 (bulletin board)
   system supported mainly by Unix machines. Originally implemented
   in 1979--1980 by Steve Bellovin, Jim Ellis, Tom Truscott, and Steve
   Daniel at Duke University, it has swiftly grown to become
   international in scope and is now probably the largest
   decentralized information utility in existence. As of early 1996,
   it hosts over 10,000
                newsgroup
                s and an average of over 500
   megabytes (the equivalent of several thousand paper pages) of new
   technical articles, news, discussion, chatter, and
                flamage
                 every day.

user n. 1. Someone doing 'real work' with the computer,
   using it as a means rather than an end. Someone who pays to use a
   computer. See
                real user
                . 2. A programmer who will believe
   anything you tell him. One who asks silly questions. [GLS
   observes: This is slightly unfair. It is true that users ask
   questions (of necessity). Sometimes they are thoughtful or deep.
   Very often they are annoying or downright stupid, apparently
   because the user failed to think for two seconds or look in the
   documentation before bothering the maintainer.] See
                luser
                .
   3. Someone who uses a program from the outside, however skillfully,
   without getting into the internals of the program. One who reports
   bugs instead of just going ahead and fixing them.

   The general theory behind this term is that there are two classes
   of people who work with a program: there are implementors (hackers)

        and
                luser
                s. The users are looked down on by hackers to some
    extent because they don't understand the full ramifications of the
    system in all its glory. (The few users who do are known as
    'real winners'.) The term is a relative one: a skilled hacker
    may be a user with respect to some program he himself does not
    hack. A LISP hacker might be one who maintains LISP or one who
    uses LISP (but with the skill of a hacker). A LISP user is one who
    uses LISP, whether skillfully or not. Thus there is some overlap
    between the two terms; the subtle distinctions must be resolved by
    context.

user-friendly adj. Programmer-hostile. Generally used by
    hackers in a critical tone, to describe systems that hold the
    user's hand so obsessively that they make it painful for the more
    experienced and knowledgeable to get any work done. See

                menuitis
                ,
                drool-proof paper
                ,
                Macintrash
                ,
                user-obsequious
                .

user-obsequious adj. Emphatic form of
                user-friendly
                .
    Connotes a system so verbose, inflexible, and determinedly
    simple-minded that it is nearly unusable. "Design a system any
    fool can use and only a fool will want to use it." See

                WIMP environment
                ,
                Macintrash
                .

USG Unix /U-S-G yoo'niks/ n. Refers to AT&T Unix
    commercial versions after
                Version 7
                , especially System III and
    System V releases 1, 2, and 3. So called because during most of
    the lifespan of those versions AT&T's support crew was called the
    'Unix Support Group'. See
                BSD
                ,
                Unix
                .

UTSL // n. [Unix] On-line acronym for 'Use the Source, Luke' (a
    pun on Obi-Wan Kenobi's "Use the Force, Luke!" in "Star
    Wars") -- analogous to
                RTFS
                 (sense 1), but more polite. This

is a common way of suggesting that someone would be better off
reading the source code that supports whatever feature is causing
confusion, rather than making yet another futile pass through the
manuals, or broadcasting questions on Usenet that haven't attracted

> wizard
> s to answer them.

Once upon a time in
> elder days
> , everyone running Unix had
source. After 1978, AT&T's policy tightened up, so this
objurgation was in theory appropriately directed only at associates
of some outfit with a Unix source license. In practice, bootlegs
of Unix source code (made precisely for reference purposes) were so
ubiquitous that one could utter it at almost anyone on the network
without concern.

Nowadays, free Unix clones have become enough that anyone can read
source legally. The most widely distributed is certainly Linux,
with variants of the NET/2 and 4.4BSD distributions running second.
Cheap commercial Unixes with source such as BSD/386 are
accelerating this trend.

UUCPNET n. The store-and-forward network consisting of all
the world's connected Unix machines (and others running some clone
of the UUCP (Unix-to-Unix CoPy) software). Any machine reachable
only via a
> bang path
> is on UUCPNET. See
> network address
> .

1.27   V

> V7 n. See
> Version 7
> .

vadding /vad'ing/ n. [from VAD, a permutation of ADV
   (i.e.,
> ADVENT
>), used to avoid a particular
> admin
> 's
continual search-and-destroy sweeps for the game] A leisure-time
activity of certain hackers involving the covert exploration of the
'secret' parts of large buildings -- basements, roofs, freight
elevators, maintenance crawlways, steam tunnels, and the like. A
few go so far as to learn locksmithing in order to synthesize
vadding keys. The verb is 'to vad' (compare
> phreaking
> ; see
also

hack
, sense 9). This term dates from the late 1970s,
before which such activity was simply called 'hacking'; the older
usage is still prevalent at MIT.

The most extreme and dangerous form of vadding is 'elevator
rodeo', a.k.a. 'elevator surfing', a sport played by wrasslin'
down a thousand-pound elevator car with a 3-foot piece of
string, and then exploiting this mastery in various stimulating
ways (such as elevator hopping, shaft exploration, rat-racing, and
the ever-popular drop experiments). Kids, don't try this at home!
See also
hobbit
(sense 2).

vanilla adj. [from the default flavor of ice cream in the
U.S.] Ordinary
flavor
, standard. When used of food, very
often does not mean that the food is flavored with vanilla extract!
For example, 'vanilla wonton soup' means ordinary wonton soup, as
opposed to hot-and-sour wonton soup. Applied to hardware and
software, as in "Vanilla Version 7 Unix can't run on a vanilla
11/34." Also used to orthogonalize chip nomenclature; for
instance, a 74V00 means what TI calls a 7400, as distinct from a
74LS00, etc. This word differs from
canonical
in that the
latter means 'default', whereas vanilla simply means
'ordinary'. For example, when hackers go on a
great-wall
,
hot-and-sour soup is the
canonical
soup to get (because that
is what most of them usually order) even though it isn't the
vanilla (wonton) soup.

vannevar /van'*-var/ n. A bogus technological prediction
or a foredoomed engineering concept, esp. one that fails by
implicitly assuming that technologies develop linearly,
incrementally, and in isolation from one another when in fact the
learning curve tends to be highly nonlinear, revolutions are
common, and competition is the rule. The prototype was Vannevar
Bush's prediction of 'electronic brains' the size of the Empire
State Building with a Niagara-Falls-equivalent cooling system for
their tubes and relays, a prediction made at a time when the
semiconductor effect had already been demonstrated. Other famous
vannevars have included magnetic-bubble memory, LISP machines,

videotex
, and a paper from the late 1970s that computed a
purported ultimate limit on areal density for ICs that was in fact
less than the routine densities of 5 years later.

vaporware /vay'pr-weir/ n. Products announced far in
advance of any release (which may or may not actually take place).

    See also
                brochureware
                .

var /veir/ or /var/ n. Short for 'variable'.
    Compare
                arg
                ,
                param
                .

VAX /vaks/ n. 1. [from Virtual Address eXtension] The
    most successful minicomputer design in industry history, possibly
    excepting its immediate ancestor, the PDP-11. Between its release
    in 1978 and its eclipse by
                killer micro
                s after about 1986, the
    VAX was probably the hacker's favorite machine of them all, esp.
    after the 1982 release of 4.2 BSD Unix (see
                BSD
). Esp.
    noted for its large, assembler-programmer-friendly instruction set
    -- an asset that became a liability after the RISC revolution.
    2. A major brand of vacuum cleaner in Britain. Cited here because
    its sales pitch, "Nothing sucks like a VAX!" became a sort of
    battle-cry of RISC partisans. It is even sometimes claimed that
    DEC actually entered a cross-licensing deal with the vacuum-Vax
    people that allowed them to market VAX computers in the U.K. in
    return for not challenging the vacuum cleaner trademark in the
    U.S.

    This slogan was originally that of a rival brand called Electrolux
    (as in "Nothing sucks like..."). In 1996, the press manager
    of Electrolux AB confirmed that the company had used this slogan in
    the late 1960s. It has apparently become a classic example (used
    in advertising textbooks) of the perils of not knowing the local
    idiom. Ironically, he tells us that Electrolux's marketing people
    were fully aware of the possible double entendre and intended it to
    gain attention.

    And gain attention it did -- the VAX-vacuum-cleaner people thought
    the slogan a sufficiently good idea to copy it. Several British
    hackers report that VAX's promotions used it in 1986--1987, and we
    have one report from a New Zealander that the infamous slogan
    surfaced there in TV ads for the product in 1992.

VAXectomy /vak-sek't*-mee/ n. [by analogy with
    'vasectomy'] A VAX removal. DEC's Microvaxen, especially, are
    much slower than newer RISC-based workstations such as the SPARC.
    Thus, if one knows one has a replacement coming, VAX removal can be
    cause for celebration.

VAXen /vak'sn/ n. [from 'oxen', perhaps influenced by
    'vixen'] (alt. 'vaxen') The plural canonically used among
    hackers for the DEC VAX computers. "Our installation has four
    PDP-10s and twenty vaxen." See
                boxen

                    .

vaxherd n. /vaks'herd/ [from 'oxherd'] A VAX operator.

vaxism /vak'sizm/ n. A piece of code that exhibits

                vaxocentrism
                 in critical areas. Compare
                PC-ism
                ,

                unixism
                .

vaxocentrism /vak'soh-sen'trizm/ n. [analogy with
   'ethnocentrism'] A notional disease said to afflict C programmers
   who persist in coding according to certain assumptions that are
   valid (esp. under Unix) on
                VAXen
                 but false elsewhere. Among
   these are:

  1. The assumption that dereferencing a null pointer is safe because
     it is all bits 0, and location 0 is readable and 0. Problem:
     this may instead cause an illegal-address trap on non-VAXen, and
     even on VAXen under OSes other than BSD Unix. Usually this is an
     implicit assumption of sloppy code (forgetting to check the
     pointer before using it), rather than deliberate exploitation of
     a misfeature.

  2. The assumption that characters are signed.

  3. The assumption that a pointer to any one type can freely be cast
     into a pointer to any other type. A stronger form of this is the
     assumption that all pointers are the same size and format, which
     means you don't have to worry about getting the casts or types
     correct in calls. Problem: this fails on word-oriented machines
     or others with multiple pointer formats.

  4. The assumption that the parameters of a routine are stored in
     memory, on a stack, contiguously, and in strictly ascending or
     descending order. Problem: this fails on many RISC
     architectures.

  5. The assumption that pointer and integer types are the same size,
     and that pointers can be stuffed into integer variables (and
     vice-versa) and drawn back out without being truncated or
     mangled. Problem: this fails on segmented architectures or
     word-oriented machines with funny pointer formats.

  6. The assumption that a data type of any size may begin at any byte
     address in memory (for example, that you can freely construct and
     dereference a pointer to a word- or greater-sized object at an
     odd char address). Problem: this fails on many (esp. RISC)
     architectures better optimized for
                HLL
                 execution speed, and can

        cause an illegal address fault or bus error.

  7. The (related) assumption that there is no padding at the end of
     types and that in an array you can thus step right from the last
     byte of a previous component to the first byte of the next one.
     This is not only machine- but compiler-dependent.

  8. The assumption that memory address space is globally flat and
     that the array reference 'foo[-1]' is necessarily valid.
     Problem: this fails at 0, or other places on segment-addressed
     machines like Intel chips (yes, segmentation is universally
     considered a
                 brain-damaged
                  way to design machines (see
                 moby
                 ),
     but that is a separate issue).

  9. The assumption that objects can be arbitrarily large with no
     special considerations. Problem: this fails on segmented
     architectures and under non-virtual-addressing environments.

 10. The assumption that the stack can be as large as memory.
     Problem: this fails on segmented architectures or almost anything
     else without virtual addressing and a paged stack.

 11. The assumption that bits and addressable units within an object
     are ordered in the same way and that this order is a constant of
     nature. Problem: this fails on
                 big-endian
                  machines.

 12. The assumption that it is meaningful to compare pointers to
     different objects not located within the same array, or to
     objects of different types. Problem: the former fails on
     segmented architectures, the latter on word-oriented machines or
     others with multiple pointer formats.

 13. The assumption that an 'int' is 32 bits, or (nearly equivalently)
     the assumption that 'sizeof(int) == sizeof(long)'. Problem: this
     fails on PDP-11s, 286-based systems and even on 386 and 68000
     systems under some compilers.

 14. The assumption that 'argv[]' is writable. Problem: this fails in
     many embedded-systems C environments and even under a few flavors
     of Unix.

   Note that a programmer can validly be accused of vaxocentrism
   even if he or she has never seen a VAX. Some of these assumptions
   (esp. 2--5) were valid on the PDP-11, the original C machine, and
   became endemic years before the VAX. The terms 'vaxocentricity'
   and 'all-the-world's-a-VAX syndrome' have been used synonymously.

vdiff /vee'dif/ v.,n. Visual diff. The operation of
   finding differences between two files by
                 eyeball search
                  . The

term `optical diff' has also been reported, and is sometimes more
specifically used for the act of superimposing two nearly identical
printouts on one another and holding them up to a light to spot
differences. Though this method is poor for detecting omissions in
the `rear' file, it can also be used with printouts of graphics, a
claim few if any diff programs can make. See
                diff
                .

veeblefester /vee'b*l-fes`tr/ n. [from the "Born
   Loser" comix via Commodore; prob. originally from "Mad"
   Magazine's `Veeblefeetzer' parodies ca. 1960] Any obnoxious person
   engaged in the (alleged) professions of marketing or management.
   Antonym of
                hacker
                . Compare
                suit
                ,
                marketroid
                .

ventilator card n. Syn.
                lace card
                .

Venus flytrap n. [after the insect-eating plant] See

                firewall machine
                .

verbage /ver'b*j/ n. A deliberate misspelling and
   mispronunciation of
                verbiage
                 that assimilates it to the word
   `garbage'. Compare
                content-free
                . More pejorative than
   `verbiage'.

verbiage n. When the context involves a software or
   hardware system, this refers to
                documentation
                . This term
   borrows the connotations of mainstream `verbiage' to suggest that
   the documentation is of marginal utility and that the motives
   behind its production have little to do with the ostensible
   subject.

Version 7 alt. V7 /vee' se'vn/ n. The first widely
   distributed version of
                Unix
                , released unsupported by Bell Labs
   in 1978. The term is used adjectivally to describe Unix features
   and programs that date from that release, and are thus guaranteed
   to be present and portable in all Unix versions (this was the
   standard gauge of portability before the POSIX and IEEE 1003
   standards). Note that this usage does *not* derive from the

release being the "seventh version of
                Unix
                "; research

                Unix
                 at Bell Labs has traditionally been numbered according to
    the edition of the associated documentation. Indeed, only the
    widely-distributed Sixth and Seventh Editions are widely known as
    V[67]; the OS that might today be known as 'V10' is instead known
    in full as "Tenth Edition Research Unix" or just "Tenth
    Edition" for short. For this reason, "V7" is often read by
    cognoscenti as "Seventh Edition". See
                BSD
                ,
                USG Unix
                ,

                Unix
                . Some old-timers impatient with commercialization and
    kernel bloat still maintain that V7 was the Last True Unix.

vgrep /vee'grep/ v.,n. Visual grep. The operation of
    finding patterns in a file optically rather than digitally (also
    called an 'optical grep'). See
                grep
                ; compare
                vdiff
                .

vi /V-I/, *not* /vi:/ and *never* /siks/ n.
    [from 'Visual Interface'] A screen editor crufted together by Bill
    Joy for an early
                BSD
                 release. Became the de facto
    standard Unix editor and a nearly undisputed hacker favorite
    outside of MIT until the rise of
                EMACS
                 after about 1984.
    Tends to frustrate new users no end, as it will neither take
    commands while expecting input text nor vice versa, and the default
    setup provides no indication of which mode the editor is in (one
    correspondent accordingly reports that he has often heard the
    editor's name pronounced /vi:l/). Nevertheless it is still
    widely used (about half the respondents in a 1991 Usenet poll
    preferred it), and even EMACS fans often resort to it as a mail
    editor and for small editing jobs (mainly because it starts up
    faster than the bulkier versions of EMACS). See
                holy wars
                .

videotex n.,obs. An electronic service offering people the
    privilege of paying to read the weather on their television screens
    instead of having somebody read it to them for free while they
    brush their teeth. The idea bombed everywhere it wasn't
    government-subsidized, because by the time videotex was practical
    the installed base of personal computers could hook up to
    timesharing services and do the things for which videotex might

have been worthwhile better and cheaper. Videotex planners badly
overestimated both the appeal of getting information from a
computer and the cost of local intelligence at the user's end.
Like the
                gorilla arm
                 effect, this has been a cautionary tale
to hackers ever since. See also
                vannevar
                .

virgin adj. Unused; pristine; in a known initial state.
   "Let's bring up a virgin system and see if it crashes again."
   (Esp. useful after contracting a
                virus
                 through
                SEX
                .)
   Also, by extension, buffers and the like within a program that have
   not yet been used.

virtual adj. [via the technical term 'virtual memory',
   prob. from the term 'virtual image' in optics] 1. Common
   alternative to
                logical
                ; often used to refer to the artificial
   objects (like addressable virtual memory larger than physical
   memory) simuled by a computer system as a convenient way to manage
   access to shared resources. 2. Simulated; performing the functions
   of something that isn't really there. An imaginative child's doll
   may be a virtual playmate. Oppose
                real
                .

virtual Friday n. (also 'logical Friday') The last day
   before an extended weekend, if that day is not a 'real' Friday.
   For example, the U.S. holiday Thanksgiving is always on a Thursday.
   The next day is often also a holiday or taken as an extra day off,
   in which case Wednesday of that week is a virtual Friday (and
   Thursday is a virtual Saturday, as is Friday). There are also
   'virtual Mondays' that are actually Tuesdays, after the three-day
   weekends associated with many national holidays in the U.S.

virtual reality n. 1. Computer simulations that use 3-D
   graphics and devices such as the Dataglove to allow the user to
   interact with the simulation. See
                cyberspace
                . 2. A form of
   network interaction incorporating aspects of role-playing games,
   interactive theater, improvisational comedy, and 'true
   confessions' magazines. In a virtual reality forum (such as
   Usenet's alt.callahans newsgroup or the
                MUD
                 experiments on
   Internet), interaction between the participants is written like a
   shared novel complete with scenery, 'foreground characters' that
   may be personae utterly unlike the people who write them, and
   common 'background characters' manipulable by all parties. The

usage (where it is often incorrectly used to denote a
                worm
                 or
    even a
                Trojan horse
). See
                phage
                ; compare
                back door
                ;
    see also
                Unix conspiracy
                .

visionary n. 1. One who hacks vision, in the sense of an
    Artificial Intelligence researcher working on the problem of
    getting computers to 'see' things using TV cameras. (There
    isn't any problem in sending information from a TV camera to a
    computer. The problem is, how can the computer be programmed to
    make use of the camera information? See
                SMOP
                ,

                AI-complete
                .) 2. [IBM] One who reads the outside literature.
    At IBM, apparently, such a penchant is viewed with awe and wonder.

VMS /V-M-S/ n. DEC's proprietary operating system for its
    VAX minicomputer; one of the seven or so environments that loom
    largest in hacker folklore. Many Unix fans generously concede that
    VMS would probably be the hacker's favorite commercial OS if Unix
    didn't exist; though true, this makes VMS fans furious. One major
    hacker gripe with VMS concerns its slowness -- thus the following
    limerick:

        There once was a system called VMS
        Of cycles by no means abstemious.
            It's chock-full of hacks
            And runs on a VAX
        And makes my poor stomach all squeamious.
                                        -- The Great Quux

    See also
                VAX
                ,
                TOPS-10
                ,
                TOPS-20
                ,
                Unix
                ,
                runic
                .

voice vt. To phone someone, as opposed to emailing them or
    connecting in
                talk mode

                    .   "I'm busy now; I'll voice you
    later."

voice-net n. Hackish way of referring to the telephone
    system, analogizing it to a digital network. Usenet

                sig block
                s not uncommonly include the sender's phone next to a
    "Voice:" or "Voice-Net:" header; common variants of this are
    "Voicenet" and "V-Net". Compare
                paper-net
                ,

                snail-mail
                .

voodoo programming n. [from George Bush's "voodoo
    economics"] The use by guess or cookbook of an
                obscure
                 or

                hairy
                 system, feature, or algorithm that one does not truly
    understand. The implication is that the technique may not work,
    and if it doesn't, one will never know why. Almost synonymous with

                black magic
                , except that black magic typically isn't
    documented and *nobody* understands it. Compare
                magic
                ,

                deep magic
                ,
                heavy wizardry
                ,
                rain dance
                ,

                cargo cult programming
                ,
                wave a dead chicken
                .

VR // [MUD] n. On-line abbrev for
                virtual reality
                ,
    as opposed to
                RL
                .

Vulcan nerve pinch n. [from the old "Star Trek" TV
    series via Commodore Amiga hackers] The keyboard combination that
    forces a soft-boot or jump to ROM monitor (on machines that support
    such a feature). On many micros this is Ctrl-Alt-Del; on Suns,
    L1-A; on some Macintoshes, it is <Cmd>-<Power switch>! Also called

```
                  three-finger salute
                  .  Compare
                  quadruple bucky
                  .
```

vulture capitalist n. Pejorative hackerism for 'venture
    capitalist', deriving from the common practice of pushing contracts
    that deprive inventors of control over their own innovations and
    most of the money they ought to have made from them.

1.28   W

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                  wabbit /wab'it/ n.   [almost certainly from Elmer Fudd's
    immortal line "You wascawwy wabbit!"] 1. A legendary early hack
    reported on a System/360 at RPI and elsewhere around 1978; this may
    have descended (if only by inspiration) from hack called RABBITS
    reported from 1969 on a Burroughs 55000 at the University of
    Washington Computer Center.  The program would make two copies of
    itself every time it was run, eventually crashing the system.
    2. By extension, any hack that includes infinite self-replication
    but is not a
                  virus
                   or
                  worm
                  .  See
                  fork bomb
                   and

                  rabbit job
                  , see also
                  cookie monster
                  .
```

```
WAITS /wayts/ n.  The mutant cousin of
                  TOPS-10
                   used
    on a handful of systems at
                  SAIL
                   up to 1990.  There was never
    an 'official' expansion of WAITS (the name itself having been
    arrived at by a rather sideways process), but it was frequently
    glossed as 'West-coast Alternative to ITS'.  Though WAITS was less
    visible than ITS, there was frequent exchange of people and ideas
    between the two communities, and innovations pioneered at WAITS
    exerted enormous indirect influence.  The early screen modes of

                  EMACS
                  , for example, were directly inspired by WAITS's 'E'
    editor -- one of a family of editors that were the first to do
    'real-time editing', in which the editing commands were invisible
    and where one typed text at the point of insertion/overwriting.
    The modern style of multi-region windowing is said to have
    originated there, and WAITS alumni at XEROX PARC and elsewhere
    played major roles in the developments that led to the XEROX Star,
```

the Macintosh, and the Sun workstations. Also invented there were

              bucky bits
               -- thus, the ALT key on every IBM PC is a WAITS
    legacy. One notable WAITS feature seldom duplicated elsewhere was
    a news-wire interface that allowed WAITS hackers to read, store,
    and filter AP and UPI dispatches from their terminals; the system
    also featured a still-unusual level of support for what is now
    called 'multimedia' computing, allowing analog audio and video
    signals to be switched to programming terminals.

waldo /wol'doh/ n. [From Robert A. Heinlein's story
    "Waldo"] 1. A mechanical agent, such as a gripper arm,
    controlled by a human limb. When these were developed for the
    nuclear industry in the mid-1940s they were named after the
    invention described by Heinlein in the story, which he wrote in
    1942. Now known by the more generic term 'telefactoring', this
    technology is of intense interest to NASA for tasks like space
    station maintenance. 2. At Harvard (particularly by Tom Cheatham
    and students), this is used instead of
              foobar
               as a
    metasyntactic variable and general nonsense word. See
              foo
              ,

              bar
              ,
              foobar
              ,
              quux
              .

walk n.,vt. Traversal of a data structure, especially an
    array or linked-list data structure in
              core
              . See also

              codewalker
              ,
              silly walk
              ,
              clobber
              .

walk off the end of vt. To run past the end of an array,
    list, or medium after stepping through it -- a good way to land in
    trouble. Often the result of an
              off-by-one error
              . Compare

              clobber
              ,
              roach
              ,
              smash the stack
              .

walking drives n. An occasional failure mode of
    magnetic-disk drives back in the days when they were huge, clunky

                  washing machine
                  s. Those old
                  dinosaur
                   parts carried
    terrific angular momentum; the combination of a misaligned spindle
    or worn bearings and stick-slip interactions with the floor could
    cause them to 'walk' across a room, lurching alternate corners
    forward a couple of millimeters at a time. There is a legend about
    a drive that walked over to the only door to the computer room and
    jammed it shut; the staff had to cut a hole in the wall in order to
    get at it! Walking could also be induced by certain patterns of
    drive access (a fast seek across the whole width of the disk,
    followed by a slow seek in the other direction). Some bands of
    old-time hackers figured out how to induce disk-accessing patterns
    that would do this to particular drive models and held disk-drive
    races.

wall interj. [WPI] 1. An indication of confusion, usually spoken
    with a quizzical tone: "Wall??" 2. A request for further
    explication. Compare
                  octal forty
                  . 3. [Unix, from 'write
    all'] v. To send a message to everyone currently logged in,
    esp. with the wall(8) utility.

    It is said that sense 1 came from the idiom 'like talking to a
    blank wall'. It was originally used in situations where, after you
    had carefully answered a question, the questioner stared at you
    blankly, clearly having understood nothing that was explained. You
    would then throw out a "Hello, wall?" to elicit some sort of
    response from the questioner. Later, confused questioners began
    voicing "Wall?" themselves.

wall follower n. A person or algorithm that compensates for
    lack of sophistication or native stupidity by efficiently following
    some simple procedure shown to have been effective in the past.
    Used of an algorithm, this is not necessarily pejorative; it
    recalls 'Harvey Wallbanger', the winning robot in an early AI
    contest (named, of course, after the cocktail). Harvey
    successfully solved mazes by keeping a 'finger' on one wall and
    running till it came out the other end. This was inelegant, but it
    was mathematically guaranteed to work on simply-connected mazes ---
    and, in fact, Harvey outperformed more sophisticated robots that
    tried to 'learn' each maze by building an internal
    representation of it. Used of humans, the term *is*
    pejorative and implies an uncreative, bureaucratic, by-the-book
    mentality. See also
                  code grinder
                  ; compare
                  droid
                  .

wall time n. (also 'wall clock time') 1. 'Real world'

time (what the clock on the wall shows), as opposed to the system
clock's idea of time. 2. The real running time of a program, as
opposed to the number of
                tick
                s required to execute it (on a
timesharing system these always differ, as no one program gets all
the ticks, and on multiprocessor systems with good thread support
one may get more processor time than real time).

wallpaper n. 1. A file containing a listing (e.g., assembly
    listing) or a transcript, esp. a file containing a transcript of
    all or part of a login session. (The idea was that the paper for
    such listings was essentially good only for wallpaper, as evidenced
    at Stanford, where it was used to cover windows.) Now rare, esp.
    since other systems have developed other terms for it (e.g., PHOTO
    on TWENEX). However, the Unix world doesn't have an equivalent
    term, so perhaps
                wallpaper
                 will take hold there. The term
    probably originated on ITS, where the commands to begin and end
    transcript files were ':WALBEG' and ':WALEND', with
    default file 'WALL PAPER' (the space was a path delimiter).
    2. The background pattern used on graphical workstations (this is
    techspeak under the 'Windows' graphical user interface to
    MS-DOS). 3. 'wallpaper file' n. The file that contains the
    wallpaper information before it is actually printed on paper.
    (Even if you don't intend ever to produce a real paper copy of the
    file, it is still called a wallpaper file.)

wango /wang'goh/ n. Random bit-level
                grovel
                ling
    going on in a system during some unspecified operation. Often used
    in combination with
                mumble
                . For example: "You start with the
    '.o' file, run it through this postprocessor that does mumble-wango
    -- and it comes out a snazzy object-oriented executable."

wank /wangk/ n.,v.,adj. [Columbia University: prob. by
    mutation from Commonwealth slang v. 'wank', to masturbate] Used
    much as
                hack
                 is elsewhere, as a noun denoting a clever
    technique or person or the result of such cleverness. May describe
    (negatively) the act of hacking for hacking's sake ("Quit wanking,
    let's go get supper!") or (more positively) a
                wizard
                . Adj.
    'wanky' describes something particularly clever (a person,
    program, or algorithm). Conversations can also get wanky when
    there are too many wanks involved. This excess wankiness is
    signalled by an overload of the 'wankometer' (compare

                bogometer
). When the wankometer overloads, the conversation's
    subject must be changed, or all non-wanks will leave. Compare

`neep-neeping` (under
neep-neep
). Usage: U.S. only. In
Britain and the Commonwealth this word is *extremely* rude and
is best avoided unless one intends to give offense.

wannabee /won'*-bee/ n, (also, more plausibly, spelled
`wannabe') [from a term recently used to describe Madonna fans
who dress, talk, and act like their idol; prob. originally from
biker slang] A would-be
hacker
. The connotations of this term
differ sharply depending on the age and exposure of the subject.
Used of a person who is in or might be entering
larval stage
,
it is semi-approving; such wannabees can be annoying but most
hackers remember that they, too, were once such creatures. When
used of any professional programmer, CS academic, writer, or

suit
, it is derogatory, implying that said person is trying to
cuddle up to the hacker mystique but doesn't, fundamentally, have a
prayer of understanding what it is all about. Overuse of terms
from this lexicon is often an indication of the
wannabee
nature. Compare
newbie
.

Historical note: The wannabee phenomenon has a slightly different
flavor now (1993) than it did ten or fifteen years ago. When the
people who are now hackerdom's tribal elders were in
larval stage
,
the process of becoming a hacker was largely unconscious
and unaffected by models known in popular culture -- communities
formed spontaneously around people who, *as individuals*, felt
irresistibly drawn to do hackerly things, and what wannabees
experienced was a fairly pure, skill-focused desire to become
similarly wizardly. Those days of innocence are gone forever;
society's adaptation to the advent of the microcomputer after 1980
included the elevation of the hacker as a new kind of folk hero,
and the result is that some people semi-consciously set out to
be hackers and borrow hackish prestige by fitting the
popular image of hackers. Fortunately, to do this really well, one
has to actually become a wizard. Nevertheless, old-time hackers
tend to share a poorly articulated disquiet about the change; among
other things, it gives them mixed feelings about the effects of
public compendia of lore like this one.

war dialer n. A cracking tool, a program that calls a given
list or range of phone numbers and records those which answer with
handshake tones (and so might be entry points to computer or
telecommunications systems). Some of these programs have become
quite sophisticated, and can now detect modem, fax, or PBX tones
and

    log each one separately. The war dialer is one of the most
    important tools in the
                phreaker
                's kit. These programs evolved
    from early
                demon dialer
                s.

warez /weirz/ n. Widely used in
                cracker
                 subcultures
    to denote cracked version of commercial software, that is versions
    from which copy-protection has been stripped. Hackers recognize
    this term but don't use it themselves. See
                warez d00dz
                .

warez d00dz /weirz doodz/ n. A substantial subculture of

                cracker
                s refer to themselves as 'warez d00dz'; there is
    evidently some connection with
                B1FF
                 here. As 'Ozone Pilot',
    one former warez d00d, wrote:

      Warez d00dz get illegal copies of copyrighted software. If it
      has copy protection on it, they break the protection so the
      software can be copied. Then they distribute it around the world
      via several gateways. Warez d00dz form badass group names like
      RAZOR and the like. They put up boards that distribute the
      latest ware, or pirate program. The whole point of the Warez
      sub-culture is to get the pirate program released and distributed
      before any other group. I know, I know. But don't ask, and it
      won't hurt as much. This is how they prove their poweress [sic].
      It gives them the right to say, "I released King's Quest IVXIX
      before you so obviously my testicles are larger." Again don't
      ask...

    The studly thing to do if one is a warez d00d, it appears, is emit
    '0-day warez', that is copies of commercial software copied and
    cracked on the same day as its retail release. Warez d00ds also
    hoard software in a big way, collecting untold megabytes of
    arcade-style games, pornographic GIFs, and applications they'll
    never use onto their hard disks. As Ozone Pilot acutely observes:

      [BELONG] is the only word you will need to know. Warez d00dz
      want to belong. They have been shunned by everyone, and thus
      turn to cyberspace for acceptance. That is why they always start
      groups like TGW, FLT, USA and the like. Structure makes them
      happy. [...] Warez d00dz will never have a handle like "Pink
      Daisy" because warez d00dz are insecure. Only someone who is
      very secure with a good dose of self-esteem can stand up to the
      cries of fag and girlie-man. More likely you will find warez
      d00dz with handles like: Doctor Death, Deranged Lunatic,
      Hellraiser, Mad Prince, Dreamdevil, The Unknown, Renegade
      Chemist, Terminator, and Twin Turbo. They like to sound badass

      when they can hide behind their terminals. More likely, if you
      were given a sample of 100 people, the person whose handle is
      Hellraiser is the last person you'd associate with the name.

   The contrast with Internet hackers is stark and instructive.
   See
                  cracker
                  ,
                  wannabee
                  ,
                  handle
                  ,
                  elite
                  .

warlording v. [from the Usenet group alt.fan.warlord]
   The act of excoriating a bloated, ugly, or derivative
                  sig block
                  .
   Common grounds for warlording include the presence of a
   signature rendered in a
                  BUAF
                  , over-used or cliched
                  sig quote
                  s,
   ugly
                  ASCII art
                  , or simply excessive size. The
   original 'Warlord' was a
                  B1FF
                  -like
                  newbie
                   c.1991 who
   featured in his sig a particularly large and obnoxious ASCII
   graphic resembling the sword of Conan the Barbarian in the 1981
   John Milius movie; the group name alt.fan.warlord was sarcasm,
   and the characteristic mode of warlording is devastatingly
   sarcastic praise.

warm boot n. See
                  boot
                  .

wart n. A small,
                  crock
                  y
                  feature
                   that sticks out
   of an otherwise
                  clean
                   design. Something conspicuous for
   localized ugliness, especially a special-case exception to a
   general rule. For example, in some versions of 'csh(1)',
   single quotes literalize every character inside them except
   '!'. In ANSI C, the '??' syntax used for obtaining ASCII
   characters in a foreign environment is a wart. See also

```
                    miswart
                    .
```

washing machine n. 1. Old-style 14-inch hard disks in
   floor-standing cabinets. So called because of the size of the
   cabinet and the 'top-loading' access to the media packs -- and, of
   course, they were always set on 'spin cycle'. The
   washing-machine idiom transcends language barriers; it is even used
   in Russian hacker jargon. See also
```
                    walking drives
                    .  The thick
```
channel cables connecting these were called 'bit hoses' (see

```
                    hose
                    , sense 3).  2. [CMU] A machine used exclusively for
```

```
                    washing software
                    .  CMU has clusters of these.
```

washing software n. The process of recompiling a software
   distribution (used more often when the recompilation is occuring
   from scratch) to pick up and merge together all of the various
   changes that have been made to the source.

water MIPS n. (see
```
                    MIPS
                    , sense 2) Large, water-cooled
```
   machines of either today's ECL-supercomputer flavor or yesterday's
   traditional
```
                    mainframe
                     type.
```

wave a dead chicken v. To perform a ritual in the direction
   of crashed software or hardware that one believes to be futile but
   is nevertheless necessary so that others are satisfied that an
   appropriate degree of effort has been expended. "I'll wave a dead
   chicken over the source code, but I really think we've run into an
   OS bug." Compare
```
                    voodoo programming
                    ,
                    rain dance
                    .
```

weasel n. [Cambridge] A naive user, one who deliberately or
   accidentally does things that are stupid or ill-advised. Roughly
   synonymous with
```
                    loser
                    .
```

webmaster n. [WWW: from
```
                    postmaster
                    ] The person at a
```
   site providing World Wide Web information who is responsible for
   maintaining the public pages and keeping the Web server running and
   properly configured.

wedged adj. 1. To be stuck, incapable of proceeding without

help. This is different from having crashed. If the system has
crashed, it has become totally non-functioning. If the system is
wedged, it is trying to do something but cannot make progress; it
may be capable of doing a few things, but not be fully operational.
For example, a process may become wedged if it
                deadlock
                s with
another (but not all instances of wedging are deadlocks). See also

                gronk
                ,
                locked up
                ,
                hosed
                . 2. Often refers to humans
suffering misconceptions. "He's totally wedged -- he's convinced
that he can levitate through meditation." 3. [Unix] Specifically
used to describe the state of a TTY left in a losing state by abort
of a screen-oriented program or one that has messed with the line
discipline in some obscure way.

There is some dispute over the origin of this term. It is usually
thought to derive from a common description of recto-cranial
inversion; however, it may actually have originated with older
'hot-press' printing technology in which physical type elements
were locked into type frames with wedges driven in by mallets.
Once this had been done, no changes in the typesetting for that
page could be made.

wedgie n. [Fairchild] A bug. Prob. related to
                wedged
                .

wedgitude /wedj'i-t[y]ood/ n. The quality or state of
being
                wedged
                .

weeble /weeb'l/ interj. [Cambridge] Used to denote
frustration, usually at amazing stupidity. "I stuck the disk in
upside down." "Weeble...." Compare
                gurfle
                .

weeds n. 1. Refers to development projects or algorithms
that have no possible relevance or practical application. Comes
from 'off in the weeds'. Used in phrases like "lexical analysis
for microcode is serious weeds...." 2. At CDC/ETA before its
demise, the phrase 'go off in the weeds' was equivalent to IBM's

                branch to Fishkill
                 and mainstream hackerdom's

                jump off into never-never land
                .

weenie n. 1. [on BBSes] Any of a species of luser

resembling a less amusing version of
               B1FF
                that infests many

               BBS
                systems. The typical weenie is a teenage boy with poor
   social skills travelling under a grandiose
               handle
                derived from
   fantasy or heavy-metal rock lyrics. Among sysops, 'the weenie
   problem' refers to the marginally literate and profanity-laden

               flamage
                weenies tend to spew all over a newly-discovered BBS.
   Compare
               spod
               ,
               computer geek
               ,
               terminal junkie
               .
   2. [Among hackers] When used with a qualifier (for example, as in

               Unix weenie
               , VMS weenie, IBM weenie) this can be either an
   insult or a term of praise, depending on context, tone of voice,
   and whether or not it is applied by a person who considers him or
   herself to be the same sort of weenie. Implies that the weenie has
   put a major investment of time, effort, and concentration into the
   area indicated; whether this is good or bad depends on the hearer's
   judgment of how the speaker feels about that area. See also

               bigot
               . 3. The semicolon character, ';' (ASCII 0111011).

Weenix /wee'niks/ n.   [ITS] A derogatory term for

               Unix
               , derived from
               Unix weenie
               . According to one noted
   ex-ITSer, it is "the operating system preferred by Unix Weenies:
   typified by poor modularity, poor reliability, hard file deletion,
   no file version numbers, case sensitivity everywhere, and users who
   believe that these are all advantages". Some ITS fans behave as
   though they believe Unix stole a future that rightfully belonged to
   them. See
               ITS
               , sense 2.

well-behaved adj. 1. [primarily
               MS-DOS
               ] Said of
   software conforming to system interface guidelines and standards.
   Well-behaved software uses the operating system to do chores such
   as keyboard input, allocating memory and drawing graphics. Oppose

                         ill-behaved
                         . 2. Software that does its job quietly and
   without counterintuitive effects. Esp. said of software having
   an interface spec sufficiently simple and well-defined that it can
   be used as a
                         tool
                          by other software. See
                         cat
                         .

well-connected adj. Said of a computer installation,
   asserts that it has reliable email links with the network and/or
   that it relays a large fraction of available
                         Usenet
                          newsgroups. 'Well-known' can be almost synonymous, but also
   implies that the site's name is familiar to many (due perhaps to an
   archive service or active Usenet users).

wetware /wet'weir/ n. [prob. from the novels of Rudy
   Rucker] 1. The human nervous system, as opposed to computer
   hardware or software. "Wetware has 7 plus or minus 2 temporary
   registers." 2. Human beings (programmers, operators,
   administrators) attached to a computer system, as opposed to the
   system's hardware or software. See
                         liveware
                         ,
                         meatware
                         .

whack v. According to arch-hacker James Gosling (designer oof

                         NeWS
                          and
                         GOSMACS
                         ), to "...modify a program with no idea
   whatsoever how it works." (See
                         whacker
                         .) It is actually
   possible to do this in nontrivial circumstances if the change is
   small and well-defined and you are very good at
                         glark
                         ing
   things from context. As a trivial example, it is relatively easy
   to change all 'stderr' writes to 'stdout' writes in a
   piece of C filter code which remains otherwise mysterious.

whacker n. [University of Maryland: from
                         hacker
                         ] 1. A
   person, similar to a
                         hacker
                         , who enjoys exploring the details
   of programmable systems and how to stretch their capabilities.
   Whereas a hacker tends to produce great hacks, a whacker only ends
   up whacking the system or program in question. Whackers are often
   quite egotistical and eager to claim
                         wizard

                status, regardless
   of the views of their peers. 2. A person who is good at
   programming quickly, though rather poorly and ineptly.

whales n. See
                like kicking dead whales down the beach
                .

whalesong n. The peculiar clicking and whooshing sounds
   made by a PEP modem such as the Telebit Trailblazer as it tries to
   synchronize with another PEP modem for their special high-speed
   mode. This sound isn't anything like the normal two-tone handshake
   between conventional V-series modems and is instantly recognizable
   to anyone who has heard it more than once. It sounds, in fact,
   very much like whale songs. This noise is also called "the moose
   call" or "moose tones".

What's a spline? [XEROX PARC] This phrase expands to: "You
   have just used a term that I've heard for a year and a half, and I
   feel I should know, but don't. My curiosity has finally overcome
   my guilt." The PARC lexicon adds "Moral: don't hesitate to ask
   questions, even if they seem obvious."

wheel n. [from slang 'big wheel' for a powerful person] A
   person who has an active
                wheel bit
                . "We need to find a wheel
   to unwedge the hung tape drives." (See
                wedged
                , sense 1.)
   The traditional name of security group zero in
                BSD
                 (to which
   the major system-internal users like
                root
                 belong) is
   'wheel'. Some vendors have expanded on this usage, modifying
   Unix so that only members of group 'wheel' can
                go root
                wheel bit n. A privilege bit that allows the possessor to
   perform some restricted operation on a timesharing system, such as
   read or write any file on the system regardless of protections,
   change or look at any address in the running monitor, crash or
   reload the system, and kill or create jobs and user accounts. The
   term was invented on the TENEX operating system, and carried over
   to TOPS-20, XEROX-IFS, and others. The state of being in a
   privileged logon is sometimes called 'wheel mode'. This term
   entered the Unix culture from TWENEX in the mid-1980s and has been
   gaining popularity there (esp. at university sites). See also

                root
                .

wheel wars n. [Stanford University] A period in
                larval stage
                    during which student hackers hassle each other by attempting
   to log each other out of the system, delete each other's files, and

```
    otherwise wreak havoc, usually at the expense of the lesser users.

White Book n.  1. Syn.
               K&R
               . 2. Adobe's fourth book in
    the PostScript series, describing the previously-secret format of
    Type 1 fonts; "Adobe Type 1 Font Format, version 1.1",
    (Addison-Wesley, 1990, ISBN 0-201-57044-0). See also
               Red Book
               ,

               Green Book
               ,
               Blue Book
               .

whizzy adj.  (alt. 'wizzy') [Sun] Describes a
               cuspy
                  program; one that is feature-rich and well presented.

wibble  [UK] 1. n.,v. Commonly used to describe chatter,
    content-free remarks or other essentially meaningless contributions
    to threads in newsgroups. "Oh, rspence is wibbling again".
    Compare
               humma
               . 2. One of the preferred
               metasyntactic variable
               s
    in the UK, forming a series with 'wobble', 'wubble', and 'flob'
    (attributed to the hilarious historical comedy "Blackadder").

WIBNI // n.  [Bell Labs: Wouldn't It Be Nice If] What most
    requirements documents and specifications consist entirely of.
    Compare
               IWBNI
               .

widget n.  1. A meta-thing.  Used to stand for a real object
    in didactic examples (especially database tutorials).  Legend has
    it that the original widgets were holders for buggy whips.  "But
    suppose the parts list for a widget has 52 entries...."
    2. [poss. evoking 'window gadget'] A user interface object in


               X
                graphical user interfaces.

wiggles n.  [scientific computation] In solving partial
    differential equations by finite difference and similar methods,
    wiggles are sawtooth (up-down-up-down) oscillations at the shortest
    wavelength representable on the grid.  If an algorithm is unstable,
    this is often the most unstable waveform, so it grows to dominate
    the solution.  Alternatively, stable (though inaccurate) wiggles
    can be generated near a discontinuity by a Gibbs phenomenon.

WIMP environment n.  [acronym: 'Window, Icon, Menu, Pointing
    device (or Pull-down menu)'] A graphical-user-interface environment
    such as
```

                 X
                  or the Macintosh interface, esp. as described by a
   hacker who prefers command-line interfaces for their superior
   flexibility and extensibility. However, it is also used without
   negative connotations; one must pay attention to voice tone and
   other signals to interpret correctly. See
                 menuitis
                 ,

                 user-obsequious
                 .

win [MIT] 1. vi. To succeed. A program wins if no
   unexpected conditions arise, or (especially) if it sufficiently

                 robust
                  to take exceptions in stride. 2. n. Success, or a
   specific instance thereof. A pleasing outcome. "So it turned out
   I could use a
                 lexer
                  generator instead of hand-coding my own
   pattern recognizer. What a win!" Emphatic forms: 'moby win',
   'super win', 'hyper-win' (often used interjectively as a
   reply). For some reason 'suitable win' is also common at MIT,
   usually in reference to a satisfactory solution to a problem.
   Oppose
                 lose
                 ; see also
                 big win
                 , which isn't quite just an
   intensification of 'win'.

win big vi. To experience serendipity. "I went shopping
   and won big; there was a 2-for-1 sale." See
                 big win
                 .

win win excl. Expresses pleasure at a
                 win
                 .

Winchester n. Informal generic term for sealed-enclosure
   magnetic-disk drives in which the read-write head planes over the
   disk surface on an air cushion. There is a legend that the name
   arose because the original 1973 engineering prototype for what
   later became the IBM 3340 featured two 30-megabyte volumes; 30--30
   became 'Winchester' when somebody noticed the similarity to the
   common term for a famous Winchester rifle (in the latter, the first
   30 referred to caliber and the second to the grain weight of the
   charge). Others claim, however, that Winchester was simply the
   laboratory in which the technology was developed.

window shopping n. [US Geological Survey] Among users of

                 WIMP environment
                 s like
                 X

                    or the Macintosh, extended
   experimentation with new window colors, fonts, and icon shapes.
   This activity can take up hours of what might otherwise have been
   productive working time. "I spent the afternoon window shopping
   until I found the coolest shade of green for my active window
   borders -- now they perfectly match my medium slate blue
   background." Serious window shoppers will spend their days with
   bitmap editors, creating new and different icons and background
   patterns for all to see. Also: 'window dressing', the act of
   applying new fonts, colors, etc. See
                    fritterware
                    , compare

                    macdink
                    .

Windoze /win'dohz/ n. See
                    Microsloth Windows
                    .

winged comments n. Comments set on the same line as code,
   as opposed to
                    boxed comments
                    . In C, for example:

      d = sqrt(x*x + y*y); /* distance from origin */

   Generally these refer only to the action(s) taken on that line.

winkey n. (alt. 'winkey face') See
                    emoticon
                    .

winnage /win'*j/ n. The situation when a lossage is
   corrected, or when something is winning.

winner 1. n. An unexpectedly good situation, program,
   programmer, or person. 2. 'real winner': Often sarcastic, but
   also used as high praise (see also the note under
                    user
).
   "He's a real winner -- never reports a bug till he can duplicate
   it and send in an example."

winnitude /win'*-t[y]ood/ n. The quality of winning (as
   opposed to
                    winnage
                    , which is the result of winning). "Guess
   what? They tweaked the microcode and now the LISP interpreter runs
   twice as fast as it used to." "That's really great! Boy, what
   winnitude!" "Yup. I'll probably get a half-hour's winnage on the
   next run of my program." Perhaps curiously, the obvious antonym
   'lossitude' is rare.

wired n. See
                    hardwired
                    .

wirehead /wi:r'hed/ n. [prob. from SF slang for an
   electrical-brain-stimulation addict] 1. A hardware hacker,
   especially one who concentrates on communications hardware. 2. An
   expert in local-area networks. A wirehead can be a network
   software wizard too, but will always have the ability to deal with
   network hardware, down to the smallest component. Wireheads are
   known for their ability to lash up an Ethernet terminator from
   spare resistors, for example.

wirewater n. Syn.
               programming fluid
               . This melds the
   mainstream slang adjective 'wired' (stimulated, up, hyperactive)
   with 'firewater'; however, it refers to caffeinacious rather than
   alcoholic beverages.

wish list n. A list of desired features or bug fixes that
   probably won't get done for a long time, usually because the person
   responsible for the code is too busy or can't think of a clean way
   to do it. "OK, I'll add automatic filename completion to the wish
   list for the new interface." Compare
               tick-list features
               .

within delta of adj. See
               delta
               .

within epsilon of adj. See
               epsilon
               .

wizard n. 1. A person who knows how a complex piece of
   software or hardware works (that is, who
               grok
               s it); esp.
   someone who can find and fix bugs quickly in an emergency. Someone
   is a
               hacker
                if he or she has general hacking ability, but is a
   wizard with respect to something only if he or she has specific
   detailed knowledge of that thing. A good hacker could become a
   wizard for something given the time to study it. 2. A person who
   is permitted to do things forbidden to ordinary people; one who has

               wheel
                privileges on a system. 3. A Unix expert, esp. a Unix
   systems programmer. This usage is well enough established that
   'Unix Wizard' is a recognized job title at some corporations and to
   most headhunters. See
               guru
               ,
               lord high fixer
               . See also

               deep magic

                    ,
                    heavy wizardry

                    ,
                    incantation

                    ,
                    magic

                    ,

                    mutter

                    ,
                    rain dance

                    ,
                    voodoo programming

                    ,
                    wave a dead chicken
                    .

Wizard Book n. "Structure and Interpretation of
   Computer Programs" (Hal Abelson, Jerry Sussman and Julie Sussman;
   MIT Press, 1984; ISBN 0-262-01077-1), an excellent computer science
   text used in introductory courses at MIT. So called because of
   the wizard on the jacket. One of the
                    bible
                    s of the
   LISP/Scheme world. Also, less commonly, known as the
                    Purple Book
                    .

wizard mode n. [from
                    rogue
                    ] A special access mode of a
   program or system, usually passworded, that permits some users
   godlike privileges. Generally not used for operating systems
   themselves (‘root mode’ or ‘wheel mode’ would be used instead).
   This term is often used with respect to games that have editable
   state.

wizardly adj. Pertaining to wizards. A wizardly

                    feature
                     is one that only a wizard could understand or use
   properly.

wok-on-the-wall n. A small microwave dish antenna used for
   cross-campus private network circuits, from the obvious resemblance
   between a microwave dish and the Chinese culinary utensil.

womb box n. 1. [TMRC] Storage space for equipment.
   2. [proposed] A variety of hard-shell equipment case with heavy
   interior padding and/or shaped carrier cutouts in a foam-rubber
   matrix; mundanely called a ‘flight case’. Used for delicate test
   equipment, electronics, and musical instruments.

WOMBAT adj. [Waste Of Money, Brains, And Time] Applied to
   problems which are both profoundly
                    uninteresting
                     in themselves

and unlikely to benefit anyone interesting even if solved. Often
used in fanciful constructions such as 'wrestling with a wombat'.
See also

         crawling horror

         ,

         SMOP

         . Also note the rather
different usage as a metasyntactic variable in

         Commonwealth Hackish

         .

wonky /wong'kee/ adj. [from Australian slang] Yet another
approximate synonym for

         broken

         . Specifically connotes a
malfunction that produces behavior seen as crazy, humorous, or
amusingly perverse. "That was the day the printer's font logic
went wonky and everybody's listings came out in Tengwar." Also in
'wonked out'. See

         funky

         ,

         demented

         ,

         bozotic

         .

woofer n. [University of Waterloo] Some varieties of wide
paper for printers have a perforation 8.5 inches from the left
margin that allows the excess on the right-hand side to be torn off
when the print format is 80 columns or less wide. The right-hand
excess may be called 'woofer'. This term (like

         tweeter

) has
been in use at Waterloo since 1972, but is elsewhere unknown. In
audio jargon, the word refers to the bass speaker(s) on a hi-fi.

workaround n. 1. A temporary

         kluge

         used to bypass,
mask, or otherwise avoid a

         bug

         or

         misfeature

         in some
system. Theoretically, workarounds are always replaced by

         fix

         es; in practice, customers often find themselves living
with workarounds for long periods of time. "The code died on NUL
characters in the input, so I fixed it to interpret them as
spaces." "That's not a fix, that's a workaround!" 2. A
procedure to be employed by the user in order to do what some
currently non-working feature should do. Hypothetical example:
"Using META-F7

         crash

         es the 4.43 build of Weemax, but as a

       workaround you can type CTRL-R, then SHIFT-F5, and delete the
    remaining
                    cruft
                     by hand."

working as designed adj. [IBM] 1. In conformance to a wrong
    or inappropriate specification; useful, but misdesigned.
    2. Frequently used as a sardonic comment on a program's utility.
    3. Unfortunately also used as a bogus reason for not accepting a
    criticism or suggestion. At
                    IBM
                    , this sense is used in
    official documents! See
                    BAD
                    .

worm n.   [from 'tapeworm' in John Brunner's novel
    "The Shockwave Rider", via XEROX PARC] A program that
    propagates itself over a network, reproducing itself as it goes.
    Compare
                    virus
                    . Nowadays the term has negative connotations,
    as it is assumed that only
                    cracker
                    s write worms. Perhaps the
    best-known example was Robert T. Morris's 'Internet Worm' of 1988,
    a 'benign' one that got out of control and hogged hundreds of
    Suns and VAXen across the U.S. See also
                    cracker
                    ,
                    RTM
                    ,

                    Trojan horse
                    ,
                    ice
                    , and
                    Great Worm, the
                    .

wormhole /werm'hohl/ n. [from the 'wormhole'
    singularities hypothesized in some versions of General Relativity
    theory] 1. obs. A location in a monitor which contains the
    address of a routine, with the specific intent of making it easy to
    substitute a different routine. This term is now obsolescent;
    modern operating systems use clusters of wormholes extensively (for
    modularization of I/O handling in particular, as in the Unix
    device-driver organization) but the preferred techspeak for these
    clusters is 'device tables', 'jump tables' or 'capability
    tables'. 2. [Amateur Packet Radio] A network path using a
    commercial satellite link to join two or more amateur VHF networks.
    So called because traffic routed through a wormhole leaves and
    re-enters the amateur network over great distances with usually
    little clue in the message routing header as to how it got from one
    relay to the other. Compare
                    gopher hole
                     (sense 2).

wound around the axle adj. In an infinite loop. Often used
    by older computer types.

wrap around vi. (also n. 'wraparound' and v. shorthand
    'wrap') 1. [techspeak] The action of a counter that starts over
    at zero or at 'minus infinity' (see
                    infinity
) after its
    maximum value has been reached, and continues incrementing, either
    because it is programmed to do so or because of an overflow (as
    when a car's odometer starts over at 0). 2. To change
                    phase
                        gradually and continuously by maintaining a steady wake-sleep ←
                            cycle
    somewhat longer than 24 hours, e.g., living six long (28-hour) days
    in a week (or, equivalently, sleeping at the rate of 10
    microhertz). This sense is also called
                    phase-wrapping
                    .

write-only code n. [a play on 'read-only memory'] Code
    so arcane, complex, or ill-structured that it cannot be modified or
    even comprehended by anyone but its author, and possibly not even
    by him/her. A
                    Bad Thing
                    .

write-only language n. A language with syntax (or
    semantics) sufficiently dense and bizarre that any routine of
    significant size is automatically
                    write-only code
                    . A
    sobriquet applied occasionally to C and often to APL, though

                    INTERCAL
                     and
                    TECO
                     certainly deserve it more.

write-only memory n. The obvious antonym to 'read-only
    memory'. Out of frustration with the long and seemingly useless
    chain of approvals required of component specifications, during
    which no actual checking seemed to occur, an engineer at Signetics
    once created a specification for a write-only memory and included
    it with a bunch of other specifications to be approved. This
    inclusion came to the attention of Signetics
                    management
                     only
    when regular customers started calling and asking for pricing
    information. Signetics published a corrected edition of the data
    book and requested the return of the 'erroneous' ones. Later,
    around 1974, Signetics bought a double-page spread in
    "Electronics" magazine's April issue and used the spec as an
    April Fools' Day joke. Instead of the more conventional
    characteristic curves, the 25120 "fully encoded, 9046 x N, Random
    Access, write-only-memory" data sheet included diagrams of "bit

capacity vs. Temp.", "Iff vs. Vff", "Number of pins remaining
vs. number of socket insertions", and "AQL vs. selling
price". The 25120 required a 6.3 VAC VFF supply, a +10V VCC, and
VDD of 0V, +/- 2%.

Wrong Thing n. A design, action, or decision that is
clearly incorrect or inappropriate. Often capitalized; always
emphasized in speech as if capitalized. The opposite of the

            Right Thing
            ; more generally, anything that is not the Right
Thing. In cases where 'the good is the enemy of the best', the
merely good -- although good -- is nevertheless the Wrong
Thing. "In C, the default is for module-level declarations to be
visible everywhere, rather than just within the module. This is
clearly the Wrong Thing."

wugga wugga /wuh'g* wuh'g*/ n. Imaginary sound that a
computer program makes as it labors with a tedious or difficult
task. Compare
            cruncha cruncha cruncha
            ,
            grind
            (sense 4).

wumpus /wuhm'p*s/ n. The central monster (and, in many
versions, the name) of a famous family of very early computer games
called "Hunt The Wumpus", dating back at least to 1972 (several
years before
            ADVENT
) on the Dartmouth Time-Sharing System.
The wumpus lived somewhere in a cave with the topology of an
dodecahedron's edge/vertex graph (later versions supported other
topologies, including an icosahedron and M"obius strip). The
player started somewhere at random in the cave with five 'crooked
arrows'; these could be shot through up to three connected rooms,
and would kill the wumpus on a hit (later versions introduced the
wounded wumpus, which got very angry). Unfortunately for players,
the movement necessary to map the maze was made hazardous not
merely by the wumpus (which would eat you if you stepped on him)
but also by bottomless pits and colonies of super bats that would
pick you up and drop you at a random location (later versions added
'anaerobic termites' that ate arrows, bat migrations, and
earthquakes that randomly changed pit locations).

This game appears to have been the first to use a non-random
graph-structured map (as opposed to a rectangular grid like the
even older Star Trek games). In this respect, as in the
dungeon-like setting and its terse, amusing messages, it prefigured

            ADVENT
             and
            Zork
             and was directly ancestral to the latter
(Zork acknowledged this heritage by including a super-bat colony).
Today, a port is distributed with SunOS and as freeware for the
Mac. A C emulation of the original Basic game is in circulation as

```
    freeware on the net.

WYSIAYG /wiz'ee-ayg/ adj.  Describes a user interface
    under which "What You See Is *All* You Get"; an unhappy
    variant of
                WYSIWYG
                . Visual, 'point-and-shoot'-style
    interfaces tend to have easy initial learning curves, but also to
    lack depth; they often frustrate advanced users who would be better
    served by a command-style interface.  When this happens, the
    frustrated user has a WYSIAYG problem.  This term is most often
    used of editors, word processors, and document formatting programs.
    WYSIWYG 'desktop publishing' programs, for example, are a clear
    win for creating small documents with lots of fonts and graphics in
    them, especially things like newsletters and presentation slides.
    When typesetting book-length manuscripts, on the other hand, scale
    changes the nature of the task; one quickly runs into WYSIAYG
    limitations, and the increased power and flexibility of a
    command-driven formatter like
                TeX
                 or Unix's
                troff
                   becomes not just desirable but a necessity.  Compare
                YAFIYGI
                .

WYSIWYG /wiz'ee-wig/ adj.  Describes a user interface
    under which "What You See Is What You Get", as opposed to one
    that uses more-or-less obscure commands that do not result in
    immediate visual feedback.  True WYSIWYG in environments supporting
    multiple fonts or graphics is a a rarely-attained ideal; there are
    variants of this term to express real-world manifestations
    including WYSIAWYG (What You See Is *Almost* What You Get) and
    WYSIMOLWYG (What You See Is More or Less What You Get).  All these
    can be mildly derogatory, as they are often used to refer to
    dumbed-down
                user-friendly
                 interfaces targeted at
    non-programmers; a hacker has no fear of obscure commands (compare

                WYSIAYG
                ).  On the other hand,
                EMACS
                 was one of the very
    first WYSIWYG editors, replacing (actually, at first overlaying)
    the extremely obscure, command-based
                TECO
                . See also

                WIMP environment
                . [Oddly enough, WYSIWYG has already made it into
    the OED, in lower case yet. -- ESR]
```

1.29 X

X /X/ n. 1. Used in various speech and writing contexts
(also in lowercase) in roughly its algebraic sense of 'unknown
within a set defined by context' (compare
              N
). Thus, the
abbreviation 680x0 stands for 68000, 68010, 68020, 68030, or 68040,
and 80x86 stands for 80186, 80286 80386 or 80486 (note that a Unix
hacker might write these as 680[0-4]0 and 80[1-4]86 or 680?0 and
80?86 respectively; see
              glob
). 2. [after the name of an
earlier window system called 'W'] An over-sized, over-featured,
over-engineered and incredibly over-complicated window system
developed at MIT and widely used on Unix systems.

XEROX PARC /zee'roks park'/ n. The famed Palo Alto
   Research Center. For more than a decade, from the early 1970s into
   the mid-1980s, PARC yielded an astonishing volume of groundbreaking
   hardware and software innovations. The modern mice, windows, and
   icons style of software interface was invented there. So was the
   laser printer and the local-area network; and PARC's series of D
   machines anticipated the powerful personal computers of the 1980s
   by a decade. Sadly, the prophets at PARC were without honor in
   their own company, so much so that it became a standard joke to
   describe PARC as a place that specialized in developing brilliant
   ideas for everyone else.

   The stunning shortsightedness and obtusity of XEROX's top-level

              suit
              s has been well anatomized in "Fumbling The Future:
   How XEROX Invented, Then Ignored, the First Personal Computer" by
   Douglas K. Smith and Robert C. Alexander (William Morrow & Co.,
   1988, ISBN 0-688-09511-9).

XOFF /X-of/ n. Syn.
              control-S
              .

XON /X-on/ n. Syn.
              control-Q
              .

xor /X'or/, /kzor/ conj. Exclusive or. 'A xor B' means
   'A or B, but not both'. "I want to get cherry pie xor a banana
   split." This derives from the technical use of the term as a
   function on truth-values that is true if exactly one of its two
   arguments is true.

xref /X'ref/ vt.,n. Hackish standard abbreviation for
   'cross-reference'.

XXX /X-X-X/ n. A marker that attention is needed.
   Commonly used in program comments to indicate areas that are kluged

up or need to be. Some hackers liken 'XXX' to the notional
heavy-porn movie rating. Compare
                FIXME
                .

xyzzy /X-Y-Z-Z-Y/, /X-Y-ziz'ee/, /ziz'ee/, or /ik-ziz'ee/
   adj.   [from the ADVENT game] The
                canonical
                 'magic
   word'. This comes from
                ADVENT
                , in which the idea is to
   explore an underground cave with many rooms and to collect the
   treasures you find there. If you type 'xyzzy' at the appropriate
   time, you can move instantly between two otherwise distant points.
   If, therefore, you encounter some bit of
                magic
                , you might
   remark on this quite succinctly by saying simply "Xyzzy!"
   "Ordinarily you can't look at someone else's screen if he has
   protected it, but if you type quadruple-bucky-clear the system will
   let you do it anyway." "Xyzzy!"

   Xyzzy has actually been implemented as an undocumented no-op
   command on several OSes; in Data General's AOS/VS, for example, it
   would typically respond "Nothing happens", just as
                ADVENT
                  did if the magic was invoked at the wrong spot or before a ←
                    player
   had performed the action that enabled the word. In more recent
   32-bit versions, by the way, AOS/VS responds "Twice as much
   happens".

   The popular 'minesweeper' game under Microsoft Windows has a
   cheat mode triggered by the command 'xyzzy<enter><right-shift>'
   that turns the top-left pixel of the screen different colors
   depending on whether or not the cursor is over a bomb.

1.30 Y

                YA- abbrev. [Yet Another] In hackish acronyms this almost
   invariably expands to
                Yet Another
                , following the precedent set
   by Unix 'yacc(1)' (Yet Another Compiler-Compiler). See

                YABA
                .

YABA /ya'b*/ n. [Cambridge] Yet Another Bloody Acronym.
   Whenever some program is being named, someone invariably suggests
   that it be given a name that is acronymic. The response from those
   with a trace of originality is to remark ironically that the
   proposed name would then be 'YABA-compatible'. Also used in

    response to questions like "What is WYSIWYG?" See also

                TLA
                .

YAFIYGI /yaf'ee-y*-gee/ adj. [coined in response to
    WYSIWYG] Describes the command-oriented ed/vi/nroff/TeX style of
    word processing or other user interface, the opposite of

                WYSIWYG
                . Stands for "You asked for it, you got it", because
    what you actually asked for is often not apparent until long after
    it is too late to do anything about it. Used to denote perversity
    ("Real Programmers use YAFIYGI tools...and *like* it!")
    or, less often, a necessary tradeoff ("Only a YAFIYGI tool can
    have full programmable flexibility in its interface.").

    This precise sense of "You asked for it, you got it" seems to
    have first appeared in Ed Post's classic parody "Real
    Programmers don't use Pascal"; the acronym is a more recent (as of
    1993) invention.

YAUN /yawn/ n. [Acronym for 'Yet Another Unix Nerd']
    Reported from the San Diego Computer Society (predominantly a
    microcomputer users' group) as a good-natured punning insult aimed
    at Unix zealots.

Yellow Book n. [proposed] The print version of this Jargon
    File; "The New Hacker's Dictionary", MIT Press, 1991 (ISBN
    0-262-68069-6). Includes all the material in the 2.9.6 version of
    the File, plus a Foreword by Guy L. Steele Jr. and a Preface by
    Eric S. Raymond. Most importantly, the book version is nicely
    typeset and includes almost all of the infamous Crunchly cartoons
    by the Great Quux, each attached to an appropriate entry. The
    second edition (1993) corresponds to the Jargon File 3.0.0.

yellow wire n. [IBM] Repair wires used when connectors
    (especially ribbon connectors) got broken due to some schlemiel
    pinching them, or to reconnect cut traces after the FE mistakenly
    cut one. Compare
                blue wire
                ,
                purple wire
                ,
                red wire
                .

Yet Another adj. [From Unix's 'yacc(1)', 'Yet
    Another Compiler-Compiler', a LALR parser generator] 1. Of your own
    work: A humorous allusion often used in titles to acknowledge that
    the topic is not original, though the content is. As in 'Yet
    Another AI Group' or 'Yet Another Simulated Annealing Algorithm'.
    2. Of others' work: Describes something of which there are already
    far too many. See also
                YA-
                ,
                YABA

```
                         '
                       YAUN

                         .
```

YKYBHTLW abbrev. // Abbreviation of 'You know you've been
    hacking too long when...', which became established on the Usenet
    group alt.folklore.computers during extended discussion of the
    indicated entry in the Jargon File.

YMMV // cav. Written-only abbreviation for
                 Your mileage may vary
                         .

You are not expected to understand this [Unix] cav. The
    canonical comment describing something
                  magic
                   or too
    complicated to bother explaining properly. From an infamous
    comment in the context-switching code of the V6 Unix kernel.

You know you've been hacking too long when... The
    set-up line for a genre of one-liners told by hackers about
    themselves. These include the following:

    *   not only do you check your email more often than your paper
          mail, but you remember your
                  network address
                   faster than your
          postal one.
    *   your
                  SO
                   kisses you on the neck and the first thing you
          think is "Uh, oh,
                  priority interrupt
                  ."
    *   you go to balance your checkbook and discover that you're
          doing it in octal.
    *   your computers have a higher street value than your car.
    *   in your universe, 'round numbers' are powers of 2, not 10.
    *   more than once, you have woken up recalling a dream in
          some programming language.
    *   you realize you have never seen half of your best friends.

    [An early version of this entry said "All but one of these
    have been reliably reported as hacker traits (some of them quite
    often). Even hackers may have trouble spotting the ringer." The
    ringer was balancing one's checkbook in octal, which I made up out
    of whole cloth. Although more respondents picked that one
    out as fiction than any of the others, I also received multiple
    independent reports of its actually happening, most famously
    to Grace Hopper while she was working with BINAC in 1949. -- ESR]

Your mileage may vary cav. [from the standard disclaimer
    attached to EPA mileage ratings by American car manufacturers] 1. A
    ritual warning often found in Unix freeware distributions.
    Translates roughly as "Hey, I tried to write this portably, but
    who *knows* what'll happen on your system?" 2. More

generally, a qualifier attached to advice. "I find that sending
flowers works well, but your mileage may vary."

Yow! /yow/ interj. [from "Zippy the Pinhead" comix] A
favored hacker expression of humorous surprise or emphasis. "Yow!
Check out what happens when you twiddle the foo option on this
display hack!" Compare
                gurfle
                .

yoyo mode n. The state in which the system is said to be
when it rapidly alternates several times between being up and being
down. Interestingly (and perhaps not by coincidence), many
hardware vendors give out free yoyos at Usenix exhibits.

Sun Microsystems gave out logoized yoyos at SIGPLAN '88. Tourists
staying at one of Atlanta's most respectable hotels were
subsequently treated to the sight of 200 of the country's top
computer scientists testing yo-yo algorithms in the lobby.

Yu-Shiang Whole Fish /yoo-shyang hohl fish/ n.,obs. The
character gamma (extended SAIL ASCII 0001001), which with a loop in
its tail looks like a little fish swimming down the page. The term
is actually the name of a Chinese dish in which a fish is cooked
whole (not
                parse
                d) and covered with Yu-Shiang (or Yu-Hsiang)
sauce. Usage: primarily by people on the MIT LISP Machine, which
could display this character on the screen. Tends to elicit
incredulity from people who hear about it second-hand.

1.31 Z

                zap 1. n. Spiciness. 2. vt. To make food spicy. 3. vt. To
make someone 'suffer' by making his food spicy. (Most hackers
love spicy food. Hot-and-sour soup is considered wimpy unless it
makes you wipe your nose for the rest of the meal.) See

                zapped
                . 4. vt. To modify, usually to correct; esp. used
when the action is performed with a debugger or binary patching
tool. Also implies surgical precision. "Zap the debug level to 6
and run it again." In the IBM mainframe world, binary patches are
applied to programs or to the OS with a program called
'superzap', whose file name is 'IMASPZAP' (possibly contrived
from I M A SuPerZAP). 5. vt. To erase or reset. 6. To
                fry
                a
chip with static electricity. "Uh oh -- I think that lightning
strike may have zapped the disk controller."

zapped adj. Spicy. This term is used to distinguish
between food that is hot (in temperature) and food that is
spicy-hot. For example, the Chinese appetizer Bon Bon

Chicken is a kind of chicken salad that is cold but zapped; by
contrast,

>   vanilla
>   wonton soup is hot but not zapped. See also

>   oriental food
>   ,
>   laser chicken
>   . See
>   zap
>   , senses 1 and
2.

zen vt. To figure out something by meditation or by a
   sudden flash of enlightenment. Originally applied to bugs, but
   occasionally applied to problems of life in general. "How'd you
   figure out the buffer allocation problem?" "Oh, I zenned it."
   Contrast

>   grok
>   , which connotes a time-extended version of
   zenning a system. Compare
>   hack mode
>   . See also
>   guru
>   .

zero vt. 1. To set to 0. Usually said of small pieces of
   data, such as bits or words (esp. in the construction 'zero
   out'). 2. To erase; to discard all data from. Said of disks and
   directories, where 'zeroing' need not involve actually writing
   zeroes throughout the area being zeroed. One may speak of
   something being 'logically zeroed' rather than being
   'physically zeroed'. See

>   scribble
>   .

zero-content adj. Syn.

>   content-free
>   .

zeroth /zee'rohth/ adj. First. Among software designers,
   comes from C's and LISP's 0-based indexing of arrays. Hardware
   people also tend to start counting at 0 instead of 1; this is
   natural since, e.g., the 256 states of 8 bits correspond to the
   binary numbers 0, 1, ..., 255 and the digital devices known as
   'counters' count in this way.

   Hackers and computer scientists often like to call the first
   chapter of a publication 'chapter 0', especially if it is of an
   introductory nature (one of the classic instances was in the First
   Edition of

>   K&R
>   ). In recent years this trait has also been
   observed among many pure mathematicians (who have an independent
   tradition of numbering from 0). Zero-based numbering tends to
   reduce

>   fencepost error

s, though it cannot eliminate them
entirely.

zigamorph /zig'*-morf/ n. 1. Hex FF (11111111) when used
   as a delimiter or
                fence
                 character. Usage: primarily at IBM
   shops. 2. [proposed] n. The Unicode non-character +UFFFF
   (1111111111111111), a character code which is not assigned to any
   character, and so is usable as end-of-string. (Unicode (a subset
   of ISO 10646) is a 16-bit character code intended to cover all of
   the world's writing systems, including Roman, Greek, Cyrillic,
   Chinese, hiragana, katakana, Devanagari, Easter Island
   'rongo-rongo', and even
                elvish
                .)

zip [primarily MS-DOS] vt. To create a compressed archive
   from a group of files using PKWare's PKZIP or a compatible
   archiver. Its use is spreading now that portable implementations
   of the algorithm have been written. Commonly used as follows:
   "I'll zip it up and send it to you." See
                tar and feather
                .

zipperhead n. [IBM] A person with a closed mind.

zombie n. [Unix] A process that has died but has not yet
   relinquished its process table slot (because the parent process
   hasn't executed a 'wait(2)' for it yet). These can be seen in
   'ps(1)' listings occasionally. Compare
                orphan
                .

zorch /zorch/ 1. [TMRC] v. To attack with an inverse heat
   sink. 2. [TMRC] v. To travel, with v approaching c
   [that is, with velocity approaching lightspeed -- ESR]. 3. [MIT]
   v. To propel something very quickly. "The new comm software is
   very fast; it really zorches files through the network." 4. [MIT]
   n. Influence. Brownie points. Good karma. The intangible and
   fuzzy currency in which favors are measured. "I'd rather not ask
   him for that just yet; I think I've used up my quota of zorch with
   him for the week." 5. [MIT] n. Energy, drive, or ability. "I
   think I'll
                punt
                 that change for now; I've been up for 30 hours
   and I've run out of zorch." 6. [MIT] v. To flunk an exam or
   course.

Zork /zork/ n. The second of the great early experiments
   in computer fantasy gaming; see
                ADVENT
                . Originally written
   on MIT-DM during 1977-1979, later distributed with BSD Unix (as a
   patched, sourceless RT-11 FORTRAN binary; see
                retrocomputing
)

and commercialized as 'The Zork Trilogy' by
                Infocom
                . The
    FORTRAN source was later rewritten for portability and released to
    Usenet under the name "Dungeon". Both FORTRAN "Dungeon" and
    translated C versions are available at many FTP sites.

zorkmid /zork'mid/ n. The canonical unit of currency in
    hacker-written games. This originated in
                Zork
                 but has spread
    to
                nethack
                 and is referred to in several other games.

1.32   [ˆA-Za-z]

                <bobbit> n.   [Usenet: alt.folklore.urban and
    elsewhere] Commonly used as a placeholder for omitted text in a
    followup message. Refers, of course, to the celebrated mutilation
    of John Bobbitt.

4.2 /for poynt too/ n. Without a prefix, this almost
    invariably refers to
                BSD
                 Unix release 4.2. Note that it is an
    indication of cluelessness to say "version 4.2", and "release
    4.2" is rare; the number stands on its own, or is used in the more
    explicit forms 4.2BSD or (less commonly) BSD 4.2. Similar remarks
    apply to "4.3", "4.4" and to earlier, less-widespread releases
    4.1 and 2.9.

'Snooze /snooz/ [FidoNet] n. Fidonews, the weekly
    official on-line newsletter of FidoNet. As the editorial policy of
    Fidonews is "anything that arrives, we print", there are often
    large articles completely unrelated to FidoNet, which in turn tend
    to elicit
                flamage
                 in subsequent issues.

(TM) //   [Usenet] ASCII rendition of the
    trademark-superscript symbol
    appended to phrases that the author feels should be recorded for
    posterity, perhaps in future editions of this lexicon. Sometimes
    used ironically as a form of protest against the recent spate of
    software and algorithm patents and 'look and feel' lawsuits. See
    also
                UN*X
                .

-oid suff. [from 'android'] 1. Used as in mainstream

English to indicate a poor imitation, a counterfeit, or some
otherwise slightly bogus resemblance. Hackers will happily use it
with all sorts of non-Greco/Latin stem words that wouldn't keep
company with it in mainstream English. For example, "He's a
nerdoid" means that he superficially resembles a nerd but can't
make the grade; a 'modemoid' might be a 300-baud box (Real Modems
run at 9600 or up); a 'computeroid' might be any
                bitty box
                .
The word 'keyboid' could be used to describe a
                chiclet keyboard
                ,
but would have to be written; spoken, it would confuse
the listener as to the speaker's city of origin. 2. More
specifically, an indicator for 'resembling an android' which in
the past has been confined to science-fiction fans and hackers. It
too has recently (in 1991) started to go mainstream (most notably
in the term 'trendoid' for victims of terminal hipness). This is
probably traceable to the popularization of the term
                droid
                 in
"Star Wars" and its sequels.

Coinages in both forms have been common in science fiction for at
least fifty years, and hackers (who are often SF fans) have
probably been making '-oid' jargon for almost that long
[though GLS and I can personally confirm only that they were
already common in the mid-1970s -- ESR].

-ware suff. [from 'software'] Commonly used to form
    jargon terms for classes of software. For examples, see

                careware
                ,
                crippleware
                ,
                crudware
                ,
                freeware
                ,

                fritterware
                ,
                guiltware
                ,
                liveware
                ,
                meatware
                ,

                payware
                ,
                psychedelicware
                ,
                shareware
                ,
                shelfware

'

vaporware
'
wetware
.

/dev/null /dev-nuhl/ n. [from the Unix null device, used
   as a data sink] A notional 'black hole' in any information space
   being discussed, used, or referred to. A controversial posting,
   for example, might end "Kudos to rasputin@kremlin.org, flames to
   /dev/null". See
                bit bucket
                .

0 Numeric zero, as opposed to the letter 'O' (the 15th
   letter of the English alphabet). In their unmodified forms they
   look a lot alike, and various kluges invented to make them visually
   distinct have compounded the confusion. If your zero is
   center-dotted and letter-O is not, or if letter-O looks almost
   rectangular but zero looks more like an American football stood on
   end (or the reverse), you're probably looking at a modern character
   display (though the dotted zero seems to have originated as an
   option on IBM 3270 controllers). If your zero is slashed but
   letter-O is not, you're probably looking at an old-style ASCII
   graphic set descended from the default typewheel on the venerable
   ASR-33 Teletype (Scandinavians, for whom Slashed-O is a letter,
   curse this arrangement). If letter-O has a slash across it and the
   zero does not, your display is tuned for a very old convention used
   at IBM and a few other early mainframe makers (Scandinavians curse
   this arrangement even more, because it means two of their
   letters collide). Some Burroughs/Unisys equipment displays a zero
   with a *reversed* slash. And yet another convention common on
   early line printers left zero unornamented but added a tail or hook
   to the letter-O so that it resembled an inverted Q or cursive
   capital letter-O (this was endorsed by a draft ANSI standard for
   how to draw ASCII characters, but the final standard changed the
   distinguisher to a tick-mark in the upper-left corner). Are we
   sufficiently confused yet?

1TBS // n. The "One True Brace Style"; see
                indent style
                .

120 reset /wuhn-twen'tee ree'set/ n. [from 120 volts,
   U.S. wall voltage] To cycle power on a machine in order to reset or
   unjam it. Compare
                Big Red Switch
                ,
                power cycle
                .

2 infix. In translation software written by hackers, infix
   2 often represents the syllable *to* with the connotation
   'translate to': as in dvi2ps (DVI to PostScript), int2string
   (integer to string), and texi2roff (Texinfo to [nt]roff).

@-party /at'par`tee/ n. [from the @-sign in an Internet
   address] (alt. `@-sign party' /at'si:n par`tee/) A
   semi-closed party thrown for hackers at a science-fiction
   convention (esp. the annual Worldcon); one must have a

                  network address
                   to get in, or at least be in company with
   someone who does. One of the most reliable opportunities for
   hackers to meet face to face with people who might otherwise be
   represented by mere phosphor dots on their screens. Compare

                  boink
                  .

@Begin // See
                  \begin
                  .

\begin // [from the LaTeX command] With \end, used
   humorously in writing to indicate a context or to remark on the
   surrounded text. For example:

      \begin
                  flame
                      Predicate logic is the only good programming
   language. Anyone who would use anything else
   is an idiot. Also, all computers should be
   tredecimal instead of binary.
      \end
                  flame
                    The Scribe users at CMU and elsewhere used to use @Begin/@End ↩
                       in
   an identical way (LaTeX was built to resemble Scribe). On Usenet,
   this construct would more frequently be rendered as `<FLAME
   ON>' and `<FLAME OFF>', or `#ifdef FLAME' and `#endif FLAME''.

1.33 Appendices

                  Hacker Folklore
****

This appendix contains several legends and fables that illuminate the
meaning of various entries in the lexicon.

The Meaning of `Hack'
=======================

"The word
                  hack
                   doesn't really have 69 different meanings", according
to MIT hacker Phil Agre. "In fact,
                  hack
                   has only one meaning, an
extremely subtle and profound one which defies articulation. Which

connotation is implied by a given use of the word depends in similarly
profound ways on the context. Similar remarks apply to a couple of
other hacker words, most notably
                random
                ."

Hacking might be characterized as 'an appropriate application of
ingenuity'. Whether the result is a quick-and-dirty patchwork job or
a carefully crafted work of art, you have to admire the cleverness
that went into it.

An important secondary meaning of
                hack
                 is 'a creative practical
joke'. This kind of hack is easier to explain to non-hackers than the
programming kind. Of course, some hacks have both natures; see the
lexicon entries for
                pseudo
                 and
                kgbvax
                . But here are some examples
of pure practical jokes that illustrate the hacking spirit:

    In 1961, students from Caltech (California Institute of
    Technology, in Pasadena) hacked the Rose Bowl football game. One
    student posed as a reporter and 'interviewed' the director of the
    University of Washington card stunts (such stunts involve people
    in the stands who hold up colored cards to make pictures). The
    reporter learned exactly how the stunts were operated, and also
    that the director would be out to dinner later.

    While the director was eating, the students (who called
    themselves the 'Fiendish Fourteen') picked a lock and stole a
    blank direction sheet for the card stunts. They then had a
    printer run off 2300 copies of the blank. The next day they
    picked the lock again and stole the master plans for the stunts
    -- large sheets of graph paper colored in with the stunt
    pictures. Using these as a guide, they made new instructions for
    three of the stunts on the duplicated blanks. Finally, they
    broke in once more, replacing the stolen master plans and
    substituting the stack of diddled instruction sheets for the
    original set.

    The result was that three of the pictures were totally different.
    Instead of 'WASHINGTON', the word ''CALTECH' was flashed. Another
    stunt showed the word 'HUSKIES', the Washington nickname, but
    spelled it backwards. And what was supposed to have been a picture of
    a husky instead showed a beaver. (Both Caltech and MIT use the beaver
    --- nature's engineer -- as a mascot.)

    After the game, the Washington faculty athletic representative
    said: "Some thought it ingenious; others were indignant." The
    Washington student body president remarked: "No hard feelings,
    but at the time it was unbelievable. We were amazed."

This is now considered a classic hack, particularly because revising
the direction sheets constituted a form of programming.

Here is another classic hack:

On November 20, 1982, MIT hacked the Harvard-Yale football game.
Just after Harvard's second touchdown against Yale, in the first
quarter, a small black ball popped up out of the ground at the
40-yard line, and grew bigger, and bigger, and bigger. The
letters 'MIT' appeared all over the ball. As the players and
officials stood around gawking, the ball grew to six feet in
diameter and then burst with a bang and a cloud of white smoke.

The "Boston Globe" later reported: "If you want to know the
truth, MIT won The Game."

The prank had taken weeks of careful planning by members of MIT's
Delta Kappa Epsilon fraternity. The device consisted of a
weather balloon, a hydraulic ram powered by Freon gas to lift it
out of the ground, and a vacuum-cleaner motor to inflate it.
They made eight separate expeditions to Harvard Stadium between 1
and 5 A.M., locating an unused 110-volt circuit in the stadium
and running buried wires from the stadium circuit to the 40-yard
line, where they buried the balloon device. When the time came
to activate the device, two fraternity members had merely to flip
a circuit breaker and push a plug into an outlet.

This stunt had all the earmarks of a perfect hack: surprise,
publicity, the ingenious use of technology, safety, and
harmlessness. The use of manual control allowed the prank to be
timed so as not to disrupt the game (it was set off between
plays, so the outcome of the game would not be unduly affected).
The perpetrators had even thoughtfully attached a note to the
balloon explaining that the device was not dangerous and
contained no explosives.

Harvard president Derek Bok commented: "They have an awful lot of
clever people down there at MIT, and they did it again."
President Paul E. Gray of MIT said: "There is absolutely no truth
to the rumor that I had anything to do with it, but I wish there
were."

The hacks above are verifiable history; they can be proved to have
happened. Many other classic-hack stories from MIT and elsewhere,
though retold as history, have the characteristics of what Jan
Brunvand has called 'urban folklore' (see
                    FOAF
). Perhaps the best
known of these is the legend of the infamous trolley-car hack, an
alleged incident in which engineering students are said to have welded
a trolley car to its tracks with thermite. Numerous versions of this
have been recorded from the 1940s to the present, most set at MIT but
at least one very detailed version set at CMU.

Brian Leibowitz has researched MIT hacks both real and mythical
extensively; the interested reader is referred to his delightful
pictorial compendium "The Journal of the Institute for Hacks,
Tomfoolery, and Pranks" (MIT Museum, 1990; ISBN 0-917027-03-5).

Finally, here is a story about one of the classic computer hacks.

   Back in the mid-1970s, several of the system support staff at
   Motorola discovered a relatively simple way to crack system
   security on the Xerox CP-V timesharing system. Through a simple
   programming strategy, it was possible for a user program to trick
   the system into running a portion of the program in 'master mode'
   (supervisor state), in which memory protection does not apply.
   The program could then poke a large value into its 'privilege
   level' byte (normally write-protected) and could then proceed to
   bypass all levels of security within the file-management system,
   patch the system monitor, and do numerous other interesting
   things. In short, the barn door was wide open.

   Motorola quite properly reported this problem to Xerox via an
   official 'level 1 SIDR' (a bug report with an intended urgency of
   'needs to be fixed yesterday'). Because the text of each SIDR
   was entered into a database that could be viewed by quite a
   number of people, Motorola followed the approved procedure: they
   simply reported the problem as 'Security SIDR', and attached all
   of the necessary documentation, ways-to-reproduce, etc.

   The CP-V people at Xerox sat on their thumbs; they either didn't
   realize the severity of the problem, or didn't assign the
   necessary operating-system-staff resources to develop and
   distribute an official patch.

   Months passed. The Motorola guys pestered their Xerox
   field-support rep, to no avail. Finally they decided to take
   direct action, to demonstrate to Xerox management just how easily
   the system could be cracked and just how thoroughly the security
   safeguards could be subverted.

   They dug around in the operating-system listings and devised a
   thoroughly devilish set of patches. These patches were then
   incorporated into a pair of programs called 'Robin Hood' and
   'Friar Tuck'. Robin Hood and Friar Tuck were designed to run as
   'ghost jobs' (daemons, in Unix terminology); they would use the
   existing loophole to subvert system security, install the
   necessary patches, and then keep an eye on one another's statuses
   in order to keep the system operator (in effect, the superuser)
   from aborting them.

   One fine day, the system operator on the main CP-V software
   development system in El Segundo was surprised by a number of
   unusual phenomena. These included the following:

       * Tape drives would rewind and dismount their tapes in the
         middle of a job.
       * Disk drives would seek back and forth so rapidly that they
         would attempt to walk across the floor (see
               walking drives
).
       * The card-punch output device would occasionally start up of
         itself and punch a
               lace card
               . These would usually jam in

          the punch.
      * The console would print snide and insulting messages from
        Robin Hood to Friar Tuck, or vice versa.
      * The Xerox card reader had two output stackers; it could be
        instructed to stack into A, stack into B, or stack into A
        (unless a card was unreadable, in which case the bad card
        was placed into stacker B). One of the patches installed by
        the ghosts added some code to the card-reader
        driver... after reading a card, it would flip over to the
        opposite stacker. As a result, card decks would divide
        themselves in half when they were read, leaving the operator
        to recollate them manually.

  Naturally, the operator called in the operating-system
  developers. They found the bandit ghost jobs running, and

          gun
          ned them... and were once again surprised. When Robin Hood
  was gunned, the following sequence of events took place:

      !X id1

      id1: Friar Tuck... I am under attack! Pray save me!
      id1: Off (aborted)

      id2: Fear not, friend Robin! I shall rout the Sheriff
           of Nottingham's men!

      id1: Thank you, my good fellow!

  Each ghost-job would detect the fact that the other had been
  killed, and would start a new copy of the recently slain program
  within a few milliseconds. The only way to kill both ghosts was
  to kill them simultaneously (very difficult) or to deliberately
  crash the system.

  Finally, the system programmers did the latter -- only to find
  that the bandits appeared once again when the system rebooted!
  It turned out that these two programs had patched the boot-time
  OS image (the kernel file, in Unix terms) and had added
  themselves to the list of programs that were to be started at
  boot time (this is similar to the way MS-DOS viruses propagate).

  The Robin Hood and Friar Tuck ghosts were finally eradicated when
  the system staff rebooted the system from a clean boot-tape and
  reinstalled the monitor. Not long thereafter, Xerox released a
  patch for this problem.

  It is alleged that Xerox filed a complaint with Motorola's
  management about the merry-prankster actions of the two employees
  in question. It is not recorded that any serious disciplinary
  action was taken against either of them.

TV Typewriters A Tale of Hackish Ingenuity
===

Here is a true story about a glass tty: One day an MIT hacker was in a

motorcycle accident and broke his leg. He had to stay in the hospital
quite a while, and got restless because he couldn't
                    hack
                    . Two of
his friends therefore took a terminal and a modem for it to the
hospital, so that he could use the computer by telephone from his
hospital bed.

Now this happened some years before the spread of home computers, and
computer terminals were not a familiar sight to the average person.
When the two friends got to the hospital, a guard stopped them and
asked what they were carrying. They explained that they wanted to
take a computer terminal to their friend who was a patient.

The guard got out his list of things that patients were permitted to
have in their rooms: TV, radio, electric razor, typewriter, tape
player, ... no computer terminals. Computer terminals weren't on the
list, so the guard wouldn't let it in. Rules are rules, you know.
(This guard was clearly a
                    droid
                    .)

Fair enough, said the two friends, and they left again. They were
frustrated, of course, because they knew that the terminal was as
harmless as a TV or anything else on the list... which gave them an
idea.

The next day they returned, and the same thing happened: a guard
stopped them and asked what they were carrying. They said: "This is a
TV typewriter!" The guard was skeptical, so they plugged it in and
demonstrated it. "See? You just type on the keyboard and what you
type shows up on the TV screen." Now the guard didn't stop to think
about how utterly useless a typewriter would be that didn't produce
any paper copies of what you typed; but this was clearly a TV
typewriter, no doubt about it. So he checked his list: "A TV is all
right, a typewriter is all right ... okay, take it on in!"

[Historical note: Many years ago, "Popular Electronics" published
solder-it-yourself plans for a TV typewriter. Despite the essential
uselessness of the device, it was an enormously popular project.
Steve Ciarcia, the man behind "Byte" magazine's "Circuit Cellar"
feature, resurrected this ghost in one of his books of the early
1980s. He ascribed its popularity (no doubt correctly) to the feeling
of power the builder could achieve by being able to decide himself
what would be shown on the TV. -- ESR]

[Antihistorical note: On September 23rd, 1992, the L.A. Times ran the
following bit of filler:

    Solomon Waters of Altadena, a 6-year-old first-grader, came home
    from his first day of school and excitedly told his mother how he
    had written on "a machine that looks like a computer -- but
    without the TV screen." She asked him if it could have been a
    "typewriter." "Yeah! Yeah!" he said. "That's what it was
    called."

I have since investigated this matter and determined that many of

today's teenagers have never seen a slide rule, either.... -- ESR]

A Story About 'Magic'
=======================

Some years ago, I (GLS) was snooping around in the cabinets that
housed the MIT AI Lab's PDP-10, and noticed a little switch glued to
the frame of one cabinet. It was obviously a homebrew job, added by
one of the lab's hardware hackers (no one knows who).

You don't touch an unknown switch on a computer without knowing what
it does, because you might crash the computer. The switch was labeled
in a most unhelpful way. It had two positions, and scrawled in pencil
on the metal switch body were the words 'magic' and 'more magic'. The
switch was in the 'more magic' position.

I called another hacker over to look at it. He had never seen the
switch before either. Closer examination revealed that the switch had
only one wire running to it! The other end of the wire did disappear
into the maze of wires inside the computer, but it's a basic fact of
electricity that a switch can't do anything unless there are two wires
connected to it. This switch had a wire connected on one side and no
wire on its other side.

It was clear that this switch was someone's idea of a silly joke.
Convinced by our reasoning that the switch was inoperative, we flipped
it. The computer instantly crashed.

Imagine our utter astonishment. We wrote it off as coincidence, but
nevertheless restored the switch to the 'more magic' position before
reviving the computer.

A year later, I told this story to yet another hacker, David Moon as I
recall. He clearly doubted my sanity, or suspected me of a
supernatural belief in the power of this switch, or perhaps thought I
was fooling him with a bogus saga. To prove it to him, I showed him
the very switch, still glued to the cabinet frame with only one wire
connected to it, still in the 'more magic' position. We scrutinized
the switch and its lone connection, and found that the other end of
the wire, though connected to the computer wiring, was connected to a
ground pin. That clearly made the switch doubly useless: not only was
it electrically nonoperative, but it was connected to a place that
couldn't affect anything anyway. So we flipped the switch.

The computer promptly crashed.

This time we ran for Richard Greenblatt, a long-time MIT hacker, who
was close at hand. He had never noticed the switch before, either.
He inspected it, concluded it was useless, got some diagonal cutters
and
                dike
                d it out. We then revived the computer and it has run fine
ever since.

We still don't know how the switch crashed the machine. There is a
theory that some circuit near the ground pin was marginal, and
flipping the switch changed the electrical capacitance enough to upset

the circuit as millionth-of-a-second pulses went through it. But
we'll never know for sure; all we can really say is that the switch
was

                        magic
                          .

I still have that switch in my basement. Maybe I'm silly, but I
usually keep it set on 'more magic'.

1994: Another explanation of this story has since been offered. Note
that the switch body was metal. Suppose that the non-connected side
of the switch was connected to the switch body (usually the body is
connected to a separate earth lug, but there are exceptions). The
body is connected to the computer case, which is, presumably,
grounded. Now the circuit ground within the machine isn't necessarily
at the same potential as the case ground, so flipping the switch
connected the circuit ground to the case ground, causing a voltage
drop/jump which reset the machine. This was probably discovered by
someone who found out the hard way that there was a potential
difference between the two, and who then wired in the switch as a
joke.

AI Koans
==========

These are some of the funniest examples of a genre of jokes told at
the MIT AI Lab about various noted hackers. The original koans were
composed by Danny Hillis. In reading these, it is at least useful to
know that Minsky, Sussman, and Drescher are AI researchers of note,
that Tom Knight was one of the Lisp machine's principal designers, and
that David Moon wrote much of Lisp Machine Lisp.

                           * * *

   A novice was trying to fix a broken Lisp machine by turning the
power off and on.

   Knight, seeing what the student was doing, spoke sternly: "You
cannot fix a machine by just power-cycling it with no understanding of
what is going wrong."

   Knight turned the machine off and on.

   The machine worked.

                           * * *

   One day a student came to Moon and said: "I understand how to make
a better garbage collector. We must keep a reference count of the
pointers to each cons."

Moon patiently told the student the following story:

      "One day a student came to Moon and said: 'I understand how to
      make a better garbage collector...

[Ed. note: Pure reference-count garbage collectors have problems with

circular structures that point to themselves.]

                                  * * *

In the days when Sussman was a novice, Minsky once came to him as he
sat hacking at the PDP-6.

    "What are you doing?", asked Minsky.

    "I am training a randomly wired neural net to play Tic-Tac-Toe"
Sussman replied.

    "Why is the net wired randomly?", asked Minsky.

    "I do not want it to have any preconceptions of how to play",
Sussman said.

    Minsky then shut his eyes.

    "Why do you close your eyes?", Sussman asked his teacher.

    "So that the room will be empty."

    At that moment, Sussman was enlightened.

                                  * * *

    A disciple of another sect once came to Drescher as he was eating
his morning meal.

    "I would like to give you this personality test", said the
outsider, "because I want you to be happy."

    Drescher took the paper that was offered him and put it into the
toaster, saying: "I wish the toaster to be happy, too."

OS and JEDGAR
===============

This story says a lot about the ITS ethos.

On the ITS system there was a program that allowed you to see what was
being printed on someone else's terminal. It spied on the other guy's
output by examining the insides of the monitor system. The output spy
program was called OS. Throughout the rest of the computer science
(and at IBM too) OS means 'operating system', but among old-time ITS
hackers it almost always meant 'output spy'.

OS could work because ITS purposely had very little in the way of
'protection' that prevented one user from trespassing on another's
areas. Fair is fair, however. There was another program that would
automatically notify you if anyone started to spy on your output. It
worked in exactly the same way, by looking at the insides of the
operating system to see if anyone else was looking at the insides that
had to do with your output. This 'counterspy' program was called
JEDGAR (a six-letterism pronounced as two syllables: /jed'gr/), in
honor of the former head of the FBI.

But there's more. JEDGAR would ask the user for 'license to kill'.
If the user said yes, then JEDGAR would actually
                gun
                 the job of the

                luser
                 who was spying. Unfortunately, people found that this made
life too violent, especially when tourists learned about it. One of
the systems hackers solved the problem by replacing JEDGAR with
another program that only pretended to do its job. It took a long
time to do this, because every copy of JEDGAR had to be patched. To
this day no one knows how many people never figured out that JEDGAR
had been defanged.

Interestingly, there is still a security module named JEDGAR alive as
of late 1994 -- in the Unisys MCP for large systems. It is unknown to
us whether the name is tribute or independent invention.

The Story of Mel, a Real Programmer
===================================

This was posted to Usenet by its author, Ed Nather (utastro!nather),
on May 21, 1983.

    A recent article devoted to the *macho* side of programming
    made the bald and unvarnished statement:

        Real Programmers write in FORTRAN.

    Maybe they do now,
    in this decadent era of
    Lite beer, hand calculators, and "user-friendly" software
    but back in the Good Old Days,
    when the term "software" sounded funny
    and Real Computers were made out of drums and vacuum tubes,
    Real Programmers wrote in machine code.
    Not FORTRAN. Not RATFOR. Not, even, assembly language.
    Machine Code.
    Raw, unadorned, inscrutable hexadecimal numbers.
    Directly.

    Lest a whole new generation of programmers
    grow up in ignorance of this glorious past,
    I feel duty-bound to describe,
    as best I can through the generation gap,
    how a Real Programmer wrote code.
    I'll call him Mel,
    because that was his name.

    I first met Mel when I went to work for Royal McBee Computer Corp.,
    a now-defunct subsidiary of the typewriter company.
    The firm manufactured the LGP-30,
    a small, cheap (by the standards of the day)
    drum-memory computer,
    and had just started to manufacture

```
the RPC-4000, a much-improved,
bigger, better, faster -- drum-memory computer.
Cores cost too much,
and weren't here to stay, anyway.
(That's why you haven't heard of the company,
or the computer.)

I had been hired to write a FORTRAN compiler
for this new marvel and Mel was my guide to its wonders.
Mel didn't approve of compilers.

"If a program can't rewrite its own code",
he asked, "what good is it?"

Mel had written,
in hexadecimal,
the most popular computer program the company owned.
It ran on the LGP-30
and played blackjack with potential customers
at computer shows.
Its effect was always dramatic.
The LGP-30 booth was packed at every show,
and the IBM salesmen stood around
talking to each other.
Whether or not this actually sold computers
was a question we never discussed.

Mel's job was to re-write
the blackjack program for the RPC-4000.
(Port?  What does that mean?)
The new computer had a one-plus-one
addressing scheme,
in which each machine instruction,
in addition to the operation code
and the address of the needed operand,
had a second address that indicated where, on the revolving drum,
the next instruction was located.

In modern parlance,
every single instruction was followed by a GO TO!
Put *that* in Pascal's pipe and smoke it.

Mel loved the RPC-4000
because he could optimize his code:
that is, locate instructions on the drum
so that just as one finished its job,
the next would be just arriving at the "read head"
and available for immediate execution.
There was a program to do that job,
an "optimizing assembler",
but Mel refused to use it.

"You never know where it's going to put things",
he explained, "so you'd have to use separate constants".

It was a long time before I understood that remark.
Since Mel knew the numerical value
```

```
of every operation code,
and assigned his own drum addresses,
every instruction he wrote could also be considered
a numerical constant.
He could pick up an earlier "add" instruction, say,
and multiply by it,
if it had the right numeric value.
His code was not easy for someone else to modify.

I compared Mel's hand-optimized programs
with the same code massaged by the optimizing assembler program,
and Mel's always ran faster.
That was because the "top-down" method of program design
hadn't been invented yet,
and Mel wouldn't have used it anyway.
He wrote the innermost parts of his program loops first,
so they would get first choice
of the optimum address locations on the drum.
The optimizing assembler wasn't smart enough to do it that way.

Mel never wrote time-delay loops, either,
even when the balky Flexowriter
required a delay between output characters to work right.
He just located instructions on the drum
so each successive one was just *past* the read head
when it was needed;
the drum had to execute another complete revolution
to find the next instruction.
He coined an unforgettable term for this procedure.
Although "optimum" is an absolute term,
like "unique", it became common verbal practice
to make it relative:
"not quite optimum" or "less optimum"
or "not very optimum".
Mel called the maximum time-delay locations
the "most pessimum".

After he finished the blackjack program
and got it to run
("Even the initializer is optimized",
he said proudly),
he got a Change Request from the sales department.
The program used an elegant (optimized)
random number generator
to shuffle the "cards" and deal from the "deck",
and some of the salesmen felt it was too fair,
since sometimes the customers lost.
They wanted Mel to modify the program
so, at the setting of a sense switch on the console,
they could change the odds and let the customer win.

Mel balked.
He felt this was patently dishonest,
which it was,
and that it impinged on his personal integrity as a programmer,
which it did,
so he refused to do it.
```

```
The Head Salesman talked to Mel,
as did the Big Boss and, at the boss's urging,
a few Fellow Programmers.
Mel finally gave in and wrote the code,
but he got the test backwards,
and, when the sense switch was turned on,
the program would cheat, winning every time.
Mel was delighted with this,
claiming his subconscious was uncontrollably ethical,
and adamantly refused to fix it.

After Mel had left the company for greener pa$ture$,
the Big Boss asked me to look at the code
and see if I could find the test and reverse it.
Somewhat reluctantly, I agreed to look.
Tracking Mel's code was a real adventure.

I have often felt that programming is an art form,
whose real value can only be appreciated
by another versed in the same arcane art;
there are lovely gems and brilliant coups
hidden from human view and admiration, sometimes forever,
by the very nature of the process.
You can learn a lot about an individual
just by reading through his code,
even in hexadecimal.
Mel was, I think, an unsung genius.

Perhaps my greatest shock came
when I found an innocent loop that had no test in it.
No test.  *None*.
Common sense said it had to be a closed loop,
where the program would circle, forever, endlessly.
Program control passed right through it, however,
and safely out the other side.
It took me two weeks to figure it out.

The RPC-4000 computer had a really modern facility
called an index register.
It allowed the programmer to write a program loop
that used an indexed instruction inside;
each time through,
the number in the index register
was added to the address of that instruction,
so it would refer
to the next datum in a series.
He had only to increment the index register
each time through.
Mel never used it.

Instead, he would pull the instruction into a machine register,
add one to its address,
and store it back.
He would then execute the modified instruction
right from the register.
The loop was written so this additional execution time
was taken into account ---
```

```
      just as this instruction finished,
      the next one was right under the drum's read head,
      ready to go.
      But the loop had no test in it.

      The vital clue came when I noticed
      the index register bit,
      the bit that lay between the address
      and the operation code in the instruction word,
      was turned on ---
      yet Mel never used the index register,
      leaving it zero all the time.
      When the light went on it nearly blinded me.

      He had located the data he was working on
      near the top of memory ---
      the largest locations the instructions could address ---
      so, after the last datum was handled,
      incrementing the instruction address
      would make it overflow.
      The carry would add one to the
      operation code, changing it to the next one in the instruction set:
      a jump instruction.
      Sure enough, the next program instruction was
      in address location zero,
      and the program went happily on its way.

      I haven't kept in touch with Mel,
      so I don't know if he ever gave in to the flood of
      change that has washed over programming techniques
      since those long-gone days.
      I like to think he didn't.
      In any event,
      I was impressed enough that I quit looking for the
      offending test,
      telling the Big Boss I couldn't find it.
      He didn't seem surprised.

      When I left the company,
      the blackjack program would still cheat
      if you turned on the right sense switch,
      and I think that's how it should be.
      I didn't feel comfortable
      hacking up the code of a Real Programmer.
```

This is one of hackerdom's great heroic epics, free verse or no. In a
few spare images it captures more about the esthetics and psychology
of hacking than all the scholarly volumes on the subject put together.
For an opposing point of view, see the entry for
                  Real Programmer
                     .

[1992 postscript -- the author writes: "The original submission to the
net was not in free verse, nor any approximation to it -- it was
straight prose style, in non-justified paragraphs. In bouncing around
the net it apparently got modified into the 'free verse' form now

popular. In other words, it got hacked on the net. That seems
appropriate, somehow." The author adds that he likes the 'free-verse'
version better...]

A Portrait of J. Random Hacker
****

This profile reflects detailed comments on an earlier 'trial balloon'
version from about a hundred Usenet respondents. Where comparatives
are used, the implicit 'other' is a randomly selected segment of the
non-hacker population of the same size as hackerdom.

An important point: Except in some relatively minor respects such as
slang vocabulary, hackers don't get to be the way they are by
imitating each other. Rather, it seems to be the case that the
combination of personality traits that makes a hacker so conditions
one's outlook on life that one tends to end up being like other
hackers whether one wants to or not (much as bizarrely detailed
similarities in behavior and preferences are found in genetic twins
raised separately).

General Appearance
==================

Intelligent. Scruffy. Intense. Abstracted. Surprisingly for a
sedentary profession, more hackers run to skinny than fat; both
extremes are more common than elsewhere. Tans are rare.

Dress
=======

Casual, vaguely post-hippie; T-shirts, jeans, running shoes,
Birkenstocks (or bare feet). Long hair, beards, and moustaches are
common. High incidence of tie-dye and intellectual or humorous
'slogan' T-shirts (only rarely computer related; that would be too
obvious).

A substantial minority prefers 'outdoorsy' clothing -- hiking boots
("in case a mountain should suddenly spring up in the machine room",
as one famous parody put it), khakis, lumberjack or chamois shirts,
and the like.

Very few actually fit the "National Lampoon" Nerd stereotype, though
it lingers on at MIT and may have been more common before 1975. At
least since the late Seventies backpacks have been more common than
briefcases, and the hacker 'look' has been more whole-earth than
whole-polyester.

Hackers dress for comfort, function, and minimal maintenance hassles
rather than for appearance (some, perhaps unfortunately, take this to
extremes and neglect personal hygiene). They have a very low
tolerance of suits and other 'business' attire; in fact, it is not
uncommon for hackers to quit a job rather than conform to a dress
code.

Female hackers almost never wear visible makeup, and many use none at
all.

Reading Habits
================

Omnivorous, but usually includes lots of science and science fiction.
The typical hacker household might subscribe to "Analog", "Scientific
American", "Whole-Earth Review", and "Smithsonian" (most hackers
ignore "Wired" and other self-consciously 'cyberpunk' magazines,
considering them
                        wannabee
                         fodder). Hackers often have a reading
range that astonishes liberal arts people but tend not to talk about
it as much. Many hackers spend as much of their spare time reading as
the average American burns up watching TV, and often keep shelves and
shelves of well-thumbed books in their homes.

Other Interests
=================

Some hobbies are widely shared and recognized as going with the
culture: science fiction, music, medievalism (in the active form
practiced by the Society for Creative Anachronism and similar
organizations), chess, go, backgammon, wargames, and intellectual
games of all kinds. (Role-playing games such as Dungeons and Dragons
used to be extremely popular among hackers but they lost a bit of
their luster as they moved into the mainstream and became heavily
commercialized. More recently, "Magic: The Gathering" has been widely
popular among hackers.) Logic puzzles. Ham radio. Other interests
that seem to correlate less strongly but positively with hackerdom
include linguistics and theater teching.

Physical Activity and Sports
==============================

Many (perhaps even most) hackers don't follow or do sports at all and
are determinedly anti-physical. Among those who do, interest in
spectator sports is low to non-existent; sports are something one
does, not something one watches on TV.

Further, hackers avoid most team sports like the plague. Volleyball
was long a notable exception, perhaps because it's non-contact and
relatively friendly; Ultimate Frisbee has become quite popular for
similar reasons. Hacker sports are almost always primarily
self-competitive ones involving concentration, stamina, and micromotor
skills: martial arts, bicycling, auto racing, kite flying, hiking,
rock climbing, aviation, target-shooting, sailing, caving, juggling,
skiing, skating (ice and roller). Hackers' delight in techno-toys
also tends to draw them towards hobbies with nifty complicated
equipment that they can tinker with.

Education
===========

Nearly all hackers past their teens are either college-degreed or
self-educated to an equivalent level. The self-taught hacker is often
considered (at least by other hackers) to be better-motivated, and may
be more respected, than his school-shaped counterpart. Academic areas

from which people often gravitate into hackerdom include (besides the
obvious computer science and electrical engineering) physics,
mathematics, linguistics, and philosophy.

Things Hackers Detest and Avoid
================================

IBM mainframes. Smurfs, Ewoks, and other forms of offensive cuteness.
Bureaucracies. Stupid people. Easy listening music. Television
(except for cartoons, movies, and "Star Trek" classic). Business
suits. Dishonesty. Incompetence. Boredom. COBOL. BASIC.
Character-based menu interfaces.

Food
======

Ethnic. Spicy. Oriental, esp. Chinese and most esp. Szechuan, Hunan,
and Mandarin (hackers consider Cantonese vaguely d'eclass'e). Hackers
prefer the exotic; for example, the Japanese-food fans among them will
eat with gusto such delicacies as fugu (poisonous pufferfish) and
whale. Thai food has experienced flurries of popularity. Where
available, high-quality Jewish delicatessen food is much esteemed. A
visible minority of Southwestern and Pacific Coast hackers prefers
Mexican.

For those all-night hacks, pizza and microwaved burritos are big.
Interestingly, though the mainstream culture has tended to think of
hackers as incorrigible junk-food junkies, many have at least mildly
health-foodist attitudes and are fairly discriminating about what they
eat. This may be generational; anecdotal evidence suggests that the
stereotype was more on the mark before the early 1980s.

Politics
==========

Vaguely liberal-moderate, except for the strong libertarian contingent
which rejects conventional left-right politics entirely. The only
safe generalization is that hackers tend to be rather
anti-authoritarian; thus, both conventional conservatism and 'hard'
leftism are rare. Hackers are far more likely than most non-hackers
to either (a) be aggressively apolitical or (b) entertain peculiar or
idiosyncratic political ideas and actually try to live by them
day-to-day.

Gender and Ethnicity
====================

Hackerdom is still predominantly male. However, the percentage of
women is clearly higher than the low-single-digit range typical for
technical professions, and female hackers are generally respected and
dealt with as equals.

In the U.S., hackerdom is predominantly Caucasian with strong
minorities of Jews (East Coast) and Orientals (West Coast). The
Jewish contingent has exerted a particularly pervasive cultural
influence (see

                    Food

, above, and note that several common jargon
terms are obviously mutated Yiddish).

The ethnic distribution of hackers is understood by them to be a
function of which ethnic groups tend to seek and value education.
Racial and ethnic prejudice is notably uncommon and tends to be met
with freezing contempt.

When asked, hackers often ascribe their culture's gender- and
color-blindness to a positive effect of text-only network channels,
and this is doubtless a powerful influence. Also, the ties many
hackers have to AI research and SF literature may have helped them to
develop an idea of personhood that is inclusive rather than exclusive
--- after all, if one's imagination readily grants full human rights
to future AI programs, robots, dolphins, and extraterrestrial aliens,
mere color and gender can't seem very important any more.

Religion
==========

Agnostic. Atheist. Non-observant Jewish. Neo-pagan. Very commonly,
three or more of these are combined in the same person. Conventional
faith-holding Christianity is rare though not unknown.

Even hackers who identify with a religious affiliation tend to be
relaxed about it, hostile to organized religion in general and all
forms of religious bigotry in particular. Many enjoy 'parody'
religions such as Discordianism and the Church of the SubGenius.

Also, many hackers are influenced to varying degrees by Zen Buddhism
or (less commonly) Taoism, and blend them easily with their 'native'
religions.

There is a definite strain of mystical, almost Gnostic sensibility
that shows up even among those hackers not actively involved with
neo-paganism, Discordianism, or Zen. Hacker folklore that pays homage
to 'wizards' and speaks of incantations and demons has too much
psychological truthfulness about it to be entirely a joke.

Ceremonial Chemicals
======================

Most hackers don't smoke tobacco, and use alcohol in moderation if at
all (though there is a visible contingent of exotic-beer fanciers, and
a few hackers are serious oenophiles). Limited use of non-addictive
psychedelic drugs, such as cannabis, LSD, psilocybin, and nitrous
oxide, etc., used to be relatively common and is still regarded with
more tolerance than in the mainstream culture. Use of 'downers' and
opiates, on the other hand, appears to be particularly rare; hackers
seem in general to dislike drugs that make them stupid. On the third
hand, many hackers regularly wire up on caffeine and/or sugar for
all-night hacking runs.

Communication Style
=====================

See the discussions of speech and writing styles near the beginning of

this File. Though hackers often have poor person-to-person
communication skills, they are as a rule quite sensitive to nuances of
language and very precise in their use of it. They are often better
at writing than at speaking.

Geographical Distribution
==============================

In the United States, hackerdom revolves on a Bay Area-to-Boston axis;
about half of the hard core seems to live within a hundred miles of
Cambridge (Massachusetts) or Berkeley (California), although there are
significant contingents in Los Angeles, in the Pacific Northwest, and
around Washington DC. Hackers tend to cluster around large cities,
especially 'university towns' such as the Raleigh-Durham area in North
Carolina or Princeton, New Jersey (this may simply reflect the fact
that many are students or ex-students living near their alma maters).

Sexual Habits
===============

Hackerdom easily tolerates a much wider range of sexual and lifestyle
variation than the mainstream culture. It includes a relatively large
gay and bisexual contingent. Hackers are somewhat more likely to live
in polygynous or polyandrous relationships, practice open marriage, or
live in communes or group houses. In this, as in general appearance,
hackerdom semi-consciously maintains 'counterculture' values.

Personality Characteristics
==============================

The most obvious common 'personality' characteristics of hackers are
high intelligence, consuming curiosity, and facility with intellectual
abstractions. Also, most hackers are 'neophiles', stimulated by and
appreciative of novelty (especially intellectual novelty). Most are
also relatively individualistic and anti-conformist.

Although high general intelligence is common among hackers, it is not
the sine qua non one might expect. Another trait is probably even
more important: the ability to mentally absorb, retain, and reference
large amounts of 'meaningless' detail, trusting to later experience to
give it context and meaning. A person of merely average analytical
intelligence who has this trait can become an effective hacker, but a
creative genius who lacks it will swiftly find himself outdistanced by
people who routinely upload the contents of thick reference manuals
into their brains. [During the production of the first book version
of this document, for example, I learned most of the rather complex
typesetting language TeX over about four working days, mainly by
inhaling Knuth's 477-page manual. My editor's flabbergasted reaction
to this genuinely surprised me, because years of associating with
hackers have conditioned me to consider such performances routine and
to be expected. -- ESR]

Contrary to stereotype, hackers are *not* usually intellectually
narrow; they tend to be interested in any subject that can provide
mental stimulation, and can often discourse knowledgeably and even
interestingly on any number of obscure subjects -- if you can get them
to talk at all, as opposed to, say, going back to their hacking.

It is noticeable (and contrary to many outsiders' expectations) that
the better a hacker is at hacking, the more likely he or she is to
have outside interests at which he or she is more than merely
competent.

Hackers are 'control freaks' in a way that has nothing to do with the
usual coercive or authoritarian connotations of the term. In the same
way that children delight in making model trains go forward and back
by moving a switch, hackers love making complicated things like
computers do nifty stuff for them. But it has to be *their* nifty
stuff. They don't like tedium, nondeterminism, or most of the fussy,
boring, ill-defined little tasks that go with maintaining a normal
existence. Accordingly, they tend to be careful and orderly in their
intellectual lives and chaotic elsewhere. Their code will be
beautiful, even if their desks are buried in 3 feet of crap.

Hackers are generally only very weakly motivated by conventional
rewards such as social approval or money. They tend to be attracted
by challenges and excited by interesting toys, and to judge the
interest of work or other activities in terms of the challenges
offered and the toys they get to play with.

In terms of Myers-Briggs and equivalent psychometric systems,
hackerdom appears to concentrate the relatively rare INTJ and INTP
types; that is, introverted, intuitive, and thinker types (as opposed
to the extroverted-sensate personalities that predominate in the
mainstream culture). ENT[JP] types are also concentrated among
hackers but are in a minority.

Weaknesses of the Hacker Personality
==

Hackers have relatively little ability to identify emotionally with
other people. This may be because hackers generally aren't much like
'other people'. Unsurprisingly, hackers also tend towards
self-absorption, intellectual arrogance, and impatience with people
and tasks perceived to be wasting their time.

As cynical as hackers sometimes wax about the amount of idiocy in the
world, they tend by reflex to assume that everyone is as rational,
'cool', and imaginative as they consider themselves. This bias often
contributes to weakness in communication skills. Hackers tend to be
especially poor at confrontation and negotiation.

Because of their passionate embrace of (what they consider to be) the

                  Right Thing
                  , hackers can be unfortunately intolerant and bigoted on
technical issues, in marked contrast to their general spirit of
camaraderie and tolerance of alternative viewpoints otherwise.
Old-time
                  ITS
                   partisans look down on the ever-growing hordes of

                  Unix
                   hackers; Unix aficionados despise

                    VMS
                     and
                    MS-DOS
                    ; and
hackers who are used to conventional command-line user interfaces
loudly loathe mouse-and-menu based systems such as the Macintosh.
Hackers who don't indulge in
                    Usenet
                     consider it a huge waste of time
and
                    bandwidth
                    ; fans of old adventure games such as
                    ADVENT
                     and

                    Zork
                     consider
                    MUD
                    s to be glorified chat systems devoid of
atmosphere or interesting puzzles; hackers who are willing to devote
endless hours to Usenet or MUDs consider
                    IRC
                     to be a *real* waste of
time; IRCies think MUDs might be okay if there weren't all those silly
puzzles in the way. And, of course, there are the perennial

                    holy wars
                     --
                    EMACS
                     vs.
                    vi
                    ,
                    big-endian
                     vs.
                    little-endian
                    , RISC vs.
CISC, etc., etc., etc. As in society at large, the intensity and
duration of these debates is usually inversely proportional to the
number of objective, factual arguments available to buttress any
position.

As a result of all the above traits, many hackers have difficulty
maintaining stable relationships. At worst, they can produce the
classic
                    computer geek
                    : withdrawn, relationally incompetent, sexually
frustrated, and desperately unhappy when not submerged in his or her
craft. Fortunately, this extreme is far less common than mainstream
folklore paints it -- but almost all hackers will recognize something
of themselves in the unflattering paragraphs above.

Hackers are often monumentally disorganized and sloppy about dealing
with the physical world. Bills don't get paid on time, clutter piles
up to incredible heights in homes and offices, and minor maintenance
tasks get deferred indefinitely.

1994-95's fad behavioral disease was a syndrome called Attention

Deficit Disorder, supposedly characterized by (among other things) a
combination of short attention span with an ability to 'hyperfocus'
imaginatively on interesting tasks. There are grounds for questioning
whether ADD actually exists, and if it does whether it is really a
'disease' rather than an extreme of a normal genetic variation like
having freckles or being able to taste DPT; but it is certainly true
that many hacker traits coincide with major indicators for ADD, and
probably true that ADD boosters would find a far higher rate of
clinical ADD among hackers than the supposedly mainstream-normal 10%.

The sort of person who routinely uses phrases like 'incompletely
socialized' usually thinks hackers are. Hackers regard such people
with contempt when they notice them at all.

Miscellaneous
===============

Hackers are more likely to have cats than dogs (in fact, it is widely
grokked that cats have the hacker nature). Many drive incredibly
decrepit heaps and forget to wash them; richer ones drive spiffy
Porsches and RX-7s and then forget to have them washed. Almost all
hackers have terribly bad handwriting, and often fall into the habit
of block-printing everything like junior draftsmen.

Bibliography
****

Here are some other books you can read to help you understand the
hacker mindset.

G"odel, Escher, Bach An Eternal Golden Braid:
Douglas Hofstadter
Basic Books, 1979
ISBN 0-394-74502-7

This book reads like an intellectual Grand Tour of hacker
preoccupations. Music, mathematical logic, programming, speculations
on the nature of intelligence, biology, and Zen are woven into a
brilliant tapestry themed on the concept of encoded self-reference.
The perfect left-brain companion to "Illuminatus".

Illuminatus!
    I.   "The Eye in the Pyramid"
    II. "The Golden Apple"
    III. "Leviathan".
Robert Shea and Robert Anton Wilson
Dell, 1988
ISBN 0-440-53981-1

This work of alleged fiction is an incredible berserko-surrealist
rollercoaster of world-girdling conspiracies, intelligent dolphins,
the fall of Atlantis, who really killed JFK, sex, drugs, rock'n'roll,
and the Cosmic Giggle Factor. First published in three volumes, but
there is now a one-volume trade paperback, carried by most chain
bookstores under SF. The perfect right-brain companion to

Hofstadter's "G"odel, Escher, Bach".   See
            Eris
            ,
            Discordianism
            ,

            random numbers
            ,
            Church of the SubGenius
            .

The Hitchhiker's Guide to the Galaxy
Douglas Adams
Pocket Books, 1981
ISBN 0-671-46149-4

This 'Monty Python in Space' spoof of SF genre traditions has been
popular among hackers ever since the original British radio show.
Read it if only to learn about Vogons (see
            bogon
) and the
significance of the number 42 (see
            random numbers
) -- and why the
winningest chess program of 1990 was called 'Deep Thought'.

The Tao of Programming
James Geoffrey
Infobooks, 1987
ISBN 0-931137-07-1

This gentle, funny spoof of the "Tao Te Ching" contains much that is
illuminating about the hacker way of thought. "When you have learned
to snatch the error code from the trap frame, it will be time for you
to leave."

Hackers
Steven Levy
Anchor/Doubleday 1984
ISBN 0-385-19195-2

Levy's book is at its best in describing the early MIT hackers at the
Model Railroad Club and the early days of the microcomputer
revolution. He never understood Unix or the networks, though, and his
enshrinement of Richard Stallman as "the last true hacker" turns out
(thankfully) to have been quite misleading. Numerous minor factual
errors also mar the text; for example, Levy's claim that the original
Jargon File derived from the TMRC Dictionary (the File originated at
Stanford and was brought to MIT in 1976; the co-authors of the first
edition had never seen the dictionary in question). There are also
numerous misspellings in the book that inflame the passions of
old-timers; as Dan Murphy, the author of TECO, once said: "You would
have thought he'd take the trouble to spell the name of a winning
editor right." Nevertheless, this remains a useful and stimulating

book that captures the feel of several important hackish subcultures.

The Computer Contradictionary
Stan Kelly-Bootle
MIT Press, 1995
ISBN 0-262-61112-0

This pastiche of Ambrose Bierce's famous work is similar in format to
the Jargon File (and quotes several entries from TNHD-2) but somewhat
different in tone and intent. It is more satirical and less
anthropological, and is largely a product of the author's literate and
quirky imagination. For example, it defines 'computer science' as "a
study akin to numerology and astrology, but lacking the precision of
the former and the success of the latter" and 'implementation' as "The
fruitless struggle by the talented and underpaid to fulfill promises
made by the rich and ignorant"; 'flowchart' becomes "to obfuscate a
problem with esoteric cartoons". Revised and expanded from "The
Devil's DP Dictionary", McGraw-Hill 1981, ISBN 0-07-034022-6.

The Devouring Fungus Tales from the Computer Age:
Karla Jennings
Norton, 1990
ISBN 0-393-30732-8

The author of this pioneering compendium knits together a great deal
of computer- and hacker-related folklore with good writing and a few
well-chosen cartoons. She has a keen eye for the human aspects of the
lore and is very good at illuminating the psychology and evolution of
hackerdom. Unfortunately, a number of small errors and awkwardnesses
suggest that she didn't have the final manuscript checked over by a
native speaker; the glossary in the back is particularly embarrassing,
and at least one classic tale (the Magic Switch story, retold here
under
                A Story About 'Magic'
                 in Appendix A is given in incomplete and
badly mangled form. Nevertheless, this book is a win overall and can
be enjoyed by hacker and non-hacker alike.

The Soul of a New Machine
Tracy Kidder
Little, Brown, 1981
(paperback: Avon, 1982
ISBN 0-380-59931-7)

This book (a 1982 Pulitzer Prize winner) documents the adventure of
the design of a new Data General computer, the MV-8000 Eagle. It is
an amazingly well-done portrait of the hacker mindset -- although
largely the hardware hacker -- done by a complete outsider. It is a
bit thin in spots, but with enough technical information to be
entertaining to the serious hacker while providing non-technical
people a view of what day-to-day life can be like -- the fun, the
excitement, the disasters. During one period, when the microcode and
logic were glitching at the nanosecond level, one of the overworked

engineers departed the company, leaving behind a note on his terminal
as his letter of resignation: "I am going to a commune in Vermont and
will deal with no unit of time shorter than a season."

Life with UNIX a Guide for Everyone:
Don Libes and Sandy Ressler
Prentice-Hall, 1989
ISBN 0-13-536657-7

The authors of this book set out to tell you all the things about Unix
that tutorials and technical books won't. The result is gossipy,
funny, opinionated, downright weird in spots, and invaluable. Along
the way they expose you to enough of Unix's history, folklore and
humor to qualify as a first-class source for these things. Because so
much of today's hackerdom is involved with Unix, this in turn
illuminates many of its in-jokes and preoccupations.

True Names ... and Other Dangers
Vernor Vinge
Baen Books, 1987
ISBN 0-671-65363-6

Hacker demigod Richard Stallman used to say that the title story of
this book "expresses the spirit of hacking best". Until the subject
of the next entry came out, it was hard to even nominate another
contender. The other stories in this collection are also fine work by
an author who has since won multiple Hugos and is one of today's very
best practitioners of hard SF.

Snow Crash
Neal Stephenson
Stephenson's epic, comic cyberpunk novel is deeply knowing about the
hacker psychology and its foibles in a way no other author of fiction
has ever even approached. His imagination, his grasp of the relevant
technical details, and his ability to communicate the excitement of
hacking and its results are astonishing, delightful, and unsurpassed.

Cyberpunk Outlaws and Hackers on the Computer Frontier:
Katie Hafner & John Markoff
Simon & Schuster 1991
ISBN 0-671-68322-5

This book gathers narratives about the careers of three notorious
crackers into a clear-eyed but sympathetic portrait of hackerdom's
dark side. The principals are Kevin Mitnick, "Pengo" and "Hagbard" of
the Chaos Computer Club, and Robert T. Morris (see
                RTM
                , sense 2) .
Markoff and Hafner focus as much on their psychologies and motivations
as on the details of their exploits, but don't slight the latter. The
result is a balanced and fascinating account, particularly useful when
read immediately before or after Cliff Stoll's
                The Cuckoo's Egg

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                .  It
is especially instructive to compare RTM, a true hacker who blundered,
with the sociopathic phone-freak Mitnick and the alienated,
drug-addled crackers who made the Chaos Club notorious.  The gulf
between
                wizard
                 and
                wannabee
                 has seldom been made more obvious.
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```
Technobabble
John Barry
MIT Press 1991
ISBN 0-262-02333-4
```

Barry's book takes a critical and humorous look at the 'technobabble'
of acronyms, neologisms, hyperbole, and metaphor spawned by the
computer industry. Though he discusses some of the same mechanisms of
jargon formation that occur in hackish, most of what he chronicles is
actually suit-speak -- the obfuscatory language of press releases,
marketroids, and Silicon Valley CEOs rather than the playful jargon of
hackers (most of whom wouldn't be caught dead uttering the kind of
pompous, passive-voiced word salad he deplores).

```
The Cuckoo's Egg
Clifford Stoll
Doubleday 1989
ISBN 0-385-24946-2
```

Clifford Stoll's absorbing tale of how he tracked Markus Hess and the
Chaos Club cracking ring nicely illustrates the difference between
'hacker' and 'cracker'. Stoll's portrait of himself, his lady Martha,
and his friends at Berkeley and on the Internet paints a marvelously
vivid picture of how hackers and the people around them like to live
and how they think.

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#==================== THE JARGON FILE ENDS HERE ====================#
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1.34 Index

120 reset

1TBS

2

4.2

<bobbit>

@-party

@Begin

A Portrait of J. Random Hacker

A Story About 'Magic'

abbrev

ABEND

accumulator

ACK

Acme

acolyte

ad-hockery

Ada

adger

admin

ADVENT

AFAIK

AFJ

AI

AI koans

AI Koans

AI-complete

AIDS

AIDX

airplane rule

aliasing bug

all-elbows

alpha particles

alt

alt bit

altmode

Aluminum Book

amoeba

amp off

amper

angle brackets

angry fruit salad

annoybot

ANSI

Anthromorphization

AOS

app

arena

arg

ARMM

armor-plated

asbestos

asbestos cork award

asbestos longjohns

ASCII

ASCII art

ASCIIbetical order

atomic

attoparsec

autobogotiphobia

automagically

avatar

awk

B1FF

back door

backbone cabal

backbone site

backgammon

background

backspace and overstrike

backward combatability

BAD

Bad Thing

bag on the side

bagbiter

bagbiting

balloonian variable

bamf

banana label

banana problem

bandwidth

bang

bang on

bang path

banner

bar

bare metal

barf

barfmail

barfulation

barfulous

barney

baroque

BASIC

batch

bathtub curve

baud

baud barf

baz

bboard

BBS

beam

beanie key

beep

beige toaster

bells and whistles

bells, whistles, and gongs

benchmark

Berkeley Quality Software

berklix

Berzerkeley

beta

BFI

bible

Bibliography

BiCapitalization

biff

Big Gray Wall

big iron

Big Red Switch

Big Room, the

big win

big-endian

bignum

bigot

bit

bit bang

bit bashing

bit bucket

bit decay

bit rot

bit twiddling

bit-paired keyboard

bitblt

BITNET

bits

bitty box

bixie

black art

black hole

black magic

blammo

blargh

blast

blat

bletch

bletcherous

blink

blinkenlights

blit

blitter

blivet

BLOB

block

block transfer computations

Bloggs Family, the

blow an EPROM

blow away

blow out

blow past

blow up

BLT

Blue Book

blue box

Blue Glue

blue goo

blue wire

blurgle

BNF

boa

board

boat anchor

bodysurf code

BOF

bogo-sort

bogometer

bogon

bogon filter

bogon flux

bogosity

bogotify

bogue out

bogus

Bohr bug

boink

bomb

bondage-and-discipline language

bonk/oif

book titles

boot

bottom feeder

bottom-up implementation

bounce

bounce message

boustrophedon

box

boxed comments

boxen

boxology

bozotic

BQS

brain dump

brain fart

brain-damaged

brain-dead

braino

branch to Fishkill

bread crumbs

break

break-even point

breath-of-life packet

breedle

bring X to its knees

brittle

broadcast storm

brochureware

broken

broken arrow

broket

Brooks's Law

browser

BRS

brute force

brute force and ignorance

BSD

BUAF

BUAG

bubble sort

bucky bits

buffer chuck

buffer overflow

bug

bug-compatible

bug-for-bug compatible

bug-of-the-month club

buglix

bulletproof

bum

bump

burble

buried treasure

burn-in period

burst page

busy-wait

buzz

BWQ

by hand

byte

bytesexual

bzzzt, wrong

C

C Programmer's Disease

calculator

Camel Book

can

can't happen

candygrammar

canonical

card walloper

careware

cargo cult programming

cascade

case and paste

casters-up mode

casting the runes

cat

catatonic

cd tilde

cdr

Ceremonial Chemicals

chad

chad box

chain

channel

channel hopping

channel op

chanop

char

charityware

chase pointers

chawmp

check

chemist

Chernobyl chicken

Chernobyl packet

chicken head

chiclet keyboard

chine nual

Chinese Army technique

choad

choke

chomp

chomper

CHOP

Christmas tree

Christmas tree packet

chrome

chug

Church of the SubGenius

CI$

Cinderella Book

Classic C

clean

CLM

clobber

clocks

clone

clone-and-hack coding

clover key

clustergeeking

COBOL

COBOL fingers

code grinder

Code of the Geeks

code police

codes

codewalker

coefficient of X

cokebottle

cold boot

COME FROM

comm mode

command key

comment out

Commonwealth Hackish

Communication Style

compact

Comparatives

compiler jock

compress

Compu$erve

computer confetti

computer geek

computron

con

condition out

condom

confuser

connector conspiracy

cons

considered harmful

console

console jockey

content-free

control-C

control-O

control-Q

control-S

Conway's Law

cookbook

cooked mode

cookie

cookie bear

cookie file

cookie jar

cookie monster

copious free time

copper

copy protection

copybroke

copyleft

copywronged

core

core cancer

core dump

core leak

Core Wars

corge

cosmic rays

cough and die

cowboy

CP/M

CPU Wars

crack root

cracker

cracking

crank

CrApTeX

crash

crash and burn

crawling horror

cray

cray instability

crayola

crayola books

crayon

creationism

creep

creeping elegance

creeping featurism

creeping featuritis

cretin

cretinous

crippleware

critical mass

crlf

crock

cross-post

crudware

cruft

cruft together

cruftsmanship

crufty

crumb

crunch

cruncha cruncha cruncha

cryppie

CTSS

CTY

cube

cubing

cursor dipped in X

cuspy

cut a tape

cybercrud

Cyberpunk

cyberpunk

cyberspace

cycle

cycle crunch

cycle drought

cycle of reincarnation

cycle server

cypherpunk

D. C. Power Lab

daemon

daemon book

dahmum

dangling pointer

dark-side hacker

Datamation

DAU

day mode

dd

DDT

de-rezz

dead

dead code

dead link

DEADBEEF

deadlock

deadly embrace

death code

Death Square

Death Star

DEC

dec

DEC Wars

decay

DEChead

deckle

DED

deep hack mode

deep magic

deep space

defenestration

defined as

dehose

delint

delta

demented

demigod

demo

demo mode

demon

demon dialer

depeditate

deprecated

derf

deserves to lose

desk check

despew

Devil Book

devo

dickless workstation

dictionary flame

diddle

die

die horribly

diff

digit

dike

ding

dink

dinosaur

dinosaur pen

dinosaurs mating

dirtball

dirty power

disclaimer

Discordianism

disk farm

display hack

Dissociated Press

distribution

disusered

do protocol

doc

doco

documentation

dodgy

dogcow

dogpile

dogwash

domainist

Don't do that, then!

dongle

dongle-disk

donuts

doorstop

dot file

double bucky

double DECkers

doubled sig

down

download

DP

DPB

DPer

dragon

Dragon Book

drain

dread high-bit disease

DRECNET

Dress

driver

droid

drool-proof paper

drop on the floor

drop-ins

drop-outs

drugged

drum

drunk mouse syndrome

Duff's device

dumb terminal

dumbass attack

dumbed down

dump

dumpster diving

dup killer

dup loop

dusty deck

DWIM

dynner

earthquake

Easter egg

Easter egging

eat flaming death

EBCDIC

echo

Education

eighty-column mind

El Camino Bignum

elder days

elegant

elephantine

elevator controller

elite

ELIZA effect

elvish

EMACS

email

Email Quotes and Inclusion Conventions

emoticon

empire

engine

English

enhancement

ENQ

EOF

EOL

EOU

epoch

epsilon

epsilon squared

era, the

Eric Conspiracy

Eris

erotics

error 33

evil

evil and rude

exa-

examining the entrails

EXCH

excl

EXE

exec

exercise, left as an

external memory

eye candy

eyeball search

face time

factor

fall over

fall through

fan

fandango on core

FAQ

FAQ list

FAQL

faradize

farkled

farming

fascist

fat electrons

faulty

fd leak

fear and loathing

feature

feature creature

feature key

feature shock

featurectomy

feep

feeper

feeping creature

feeping creaturism

feetch feetch

fence

fencepost error

fepped out

FidoNet

field circus

field servoid

Fight-o-net

File Attach

File Request

file signature

filk

film at 11

filter

Finagle's Law

fine

finger

finger trouble

finger-pointing syndrome

finn

firebottle

firefighting

firehose syndrome

firewall code

firewall machine

fireworks mode

firmy

fish

FISH queue

FITNR

fix

FIXME

flag

flag day

flaky

flamage

flame

flame bait

flame on

flame war

flamer

flap

flarp

flat

flat-ASCII

flat-file

flatten

flavor

flavorful

flippy

flood

flowchart

flower key

flush

flypage

Flyspeck 3

flytrap

FM

fnord

FOAF

FOD

fold case

followup

fontology

foo

foobar

```
Food

fool

fool file, the

Foonly

footprint

for free

for the rest of us

for values of

fora

foreground

fork bomb

forked

Format For New Entries

Fortrash

fortune cookie

forum

fossil

four-color glossies

fragile

fred

frednet

freeware

freeze

fried

frink

friode

fritterware

frob

frobnicate
```

frobnitz

frog

frogging

front end

frotz

frotzed

frowney

FRS

fry

FSF

FTP

FUBAR

fuck me harder

FUD

FUD wars

fudge

fudge factor

fuel up

Full Monty, the

fum

funky

funny money

furrfu

fuzzball

G
 G
g-file

gabriel

gag

gang bang

garbage collect

garply

gas

gaseous

gawble

GC

GCOS

GECOS

gedanken

geef

geek code

geek out

gen

Gender and Ethnicity

gender mender

General Appearance

General Public Virus

generate

Genius From Mars Technique

gensym

Geographical Distribution

Get a life!

Get a real computer!

GFR

GIFs at 11

gig

giga-

GIGO

gilley

gillion

GIPS

glark

glass

glass tty

glassfet

glitch

glob

glork

glue

gnarly

GNU

GNUMACS

go flatline

go root

go-faster stripes

gobble

Godwin's Law

Godzillagram

golden

golf-ball printer

gonk

gonkulator

gonzo

Good Thing

gopher

gopher hole

gorets

gorilla arm

gorp

GOSMACS

Gosperism

gotcha

GPL

GPV

grault

gray goo

Great Renaming

Great Runes

Great Worm, the

great-wall

Green Book

green bytes

green card

green lightning

green machine

Green's Theorem

grep

grilf

grind

grind crank

gripenet

gritch

grok

gronk

gronk out

gronked

grovel

grunge

gubbish

guiltware

gumby

gun

gunch

gurfle

guru

guru meditation

gweep

h

ha ha only serious

hack

hack attack

hack mode

hack on

hack together

hack up

hack value

hacked off

hacked up

hacker

hacker ethic, the

Hacker Folklore

Hacker Speech Style

Hacker Writing Style

Hackers

hacking run

Hacking X for Y

Hackintosh

hackish

hackishness

hackitude

hair

hairball

hairy

HAKMEM

hakspek

hammer

hamster

hand cruft

hand-hacking

hand-roll

handle

handshaking

handwave

hang

Hanlon's Razor

happily

haque

hard boot

hardcoded

hardwarily

hardwired

has the X nature

hash bucket

hash collision

hat

HCF

heads down

heartbeat

heatseeker

heavy metal

heavy wizardry

heavyweight

heisenbug

Helen Keller mode

hello, sailor!

hello, wall!

hello, world

hex

hexadecimal

hexit

HHOK

HHOS

hidden flag

high bit

high moby

highly

hing

hired gun

hirsute

HLL

hoarding

hobbit

hog

hole

holy wars

home box

home machine

hook

hop

hose

hosed

hot chat

hot spot

hotlink

house wizard

How Jargon Works

How to Use the Lexicon

HP-SUX

huff

humma

Humor, Hacker

hung

hungry puppy

hungus

hyperspace

hysterical reasons

I didn't change anything!

I see no X here.

IBM

```
IBM discount

ICBM address

ice

idempotent

If you want X, you know where to find

ifdef out

ill-behaved

Illuminatus!

IMHO

Imminent Death Of The Net Predicted!

in the extreme

inc

incantation

include

include war

indent style

index

infant mortality

infinite

infinite loop

Infinite-Monkey Theorem

infinity

Infocom

initgame

insanely great

INTERCAL

interesting

International Style
```

juggling eggs

jump off into never-never land

jupiter

K

K&R

k-

kahuna

kamikaze packet

kangaroo code

ken

kgbvax

KIBO

kiboze

kick

kill file

killer micro

killer poke

kilo-

KIPS

KISS Principle

kit

klone

kludge

kluge

kluge around

kluge up

Knights of the Lambda Calculus

Knuth

kremvax

kyrka

lace card

lamer

language lawyer

languages of choice

larval stage

lase

laser chicken

Lasherism

laundromat

LDB

leaf site

leak

leaky heap

leapfrog attack

leech

legal

legalese

LER

LERP

let the smoke out

letterbomb

lexer

lexiphage

life

Life is hard

Life with UNIX

light pipe

```
lightweight

like kicking dead whales down the beac

like nailing jelly to a tree

line 666

line eater, the

line noise

line starve

linearithmic

link farm

link-dead

lint

Linux

lion food

Lions Book

LISP

literature, the

lithium lick

little-endian

live

live data

Live Free Or Die!

livelock

liveware

lobotomy

locals, the

locked and loaded

locked up

logic bomb
```

logical

loop through

loose bytes

lord high fixer

lose

lose lose

loser

losing

loss

lossage

lost in the noise

lost in the underflow

lots of MIPS but no I/O

low-bandwidth

LPT

Lubarsky's Law of Cybernetic Entomolog

lunatic fringe

lurker

luser

M

macdink

machinable

machoflops

Macintoy

Macintrash

macro

macro-

macrology

macrotape

maggotbox

magic

magic cookie

magic number

magic smoke

mail storm

mailbomb

mailing list

main loop

mainframe

management

mandelbug

manged

mangle

mangler

mango

manularity

marbles

marginal

Marginal Hacks

marginally

marketroid

Mars

martian

massage

math-out

Matrix

maximum Maytag mode

Mbogo, Dr. Fred

meatware

meeces

meg

mega-

megapenny

MEGO

meltdown, network

meme

meme plague

memetics

memory farts

memory leak

memory smash

menuitis

mess-dos

meta

meta bit

metasyntactic variable

MFTL

mickey

mickey mouse program

micro-

MicroDroid

microfloppies

microfortnight

microLenat

microReid

Microsloth Windows

microtape

middle-endian

milliLampson

minifloppies

MIPS

misbug

Miscellaneous

misfeature

Missed'em-five

missile address

miswart

moby

mockingbird

mod

mode

mode bit

modulo

molly-guard

Mongolian Hordes technique

monkey up

monkey, scratch

monstrosity

monty

Moof

Moore's Law

moose call

moria

MOTAS

MOTOS

MOTSS

mouse ahead

mouse around

mouse belt

mouse droppings

mouse elbow

mouso

MS-DOS

mu

MUD

muddie

mudhead

multician

Multics

multitask

mumblage

mumble

munch

munching

munching squares

munchkin

mundane

mung

munge

Murphy's Law

music

mutter

N

nadger

nagware

nailed to the wall

nailing jelly

naive

naive user

NAK

nano

nano-

nanoacre

nanobot

nanocomputer

nanofortnight

nanotechnology

nasal demons

nastygram

Nathan Hale

nature

neat hack

neats vs. scruffies

neep-neep

neophilia

nerd

net.-

net.god

net.personality

net.police

NetBOLLIX

netburp

netdead

nethack

netiquette

netlag

netnews

netrock

netsplit

netter

network address

network meltdown

network, the

New Jersey

New Testament

newbie

newgroup wars

newline

news

NeWS

newsfroup

newsgroup

nick

nickle

night mode

Nightmare File System

NIL

Ninety-Ninety Rule

NMI

no-op

noddy

NOMEX underwear

Nominal Semidestructor

non-optimal solution

nonlinear

nontrivial

not ready for prime time

notwork

NP-

nroff

NSA line eater

nude

nuke

number-crunching

numbers

NUXI problem

nybble

nyetwork

Ob-

Obfuscated C Contest

obi-wan error

Objectionable-C

obscure

octal forty

Of Slang, Jargon, and Techspeak

off the trolley

off-by-one error

offline

ogg

old fart

Old Testament

one-banana problem

one-line fix

one-liner wars

ooblick

op

open

Open DeathTrap

open switch

operating system

optical diff

optical grep

optimism

Orange Book

oriental food

orphan

orphaned i-node

orthogonal

OS

OS and JEDGAR

OS/2

OSU

Other Interests

Other Lexicon Conventions

OTOH

out-of-band

overflow bit

overflow pdl

Overgeneralization

overrun

overrun screw

P-mail

P.O.D.

padded cell

page in

page out

pain in the net

Pangloss parity

paper-net

param

PARC

parent message

parity errors

Parkinson's Law of Data

parm

parse

Pascal

pastie

patch

patch space

path

pathological

payware

PBD

PC-ism

PD

pdl

PDL

PDP-10

PDP-20

peek

pencil and paper

peon

percent-S

perf

perfect programmer syndrome

Perl

person of no account

Personality Characteristics

pessimal

pessimizing compiler

peta-

PETSCII

phage

phase

phase of the moon

phase-wrapping

phreaker

phreaking

Physical Activity and Sports

pico-

pig, run like a

pilot error

ping

Pink-Shirt Book

PIP

pistol

pixel sort

pizza box

pizza, ANSI standard

plaid screen

plain-ASCII

plan file

platinum-iridium

playpen

playte

plingnet

plokta

plonk

plugh

plumbing

PM

pnambic

pod

point-and-drool interface

poke

Politics

poll

polygon pusher

POM

pop

POPJ

poser

post

postcardware

posting

postmaster

PostScript

pound on

power cycle

power hit

PPN

precedence lossage

prepend

prestidigitization

pretty pictures

prettyprint

pretzel key

priesthood

prime time

printing discussion

priority interrupt

profile

progasm

proglet

program

Programmer's Cheer

programming

programming fluid

Pronunciation Guide

propeller head

propeller key

proprietary

protocol

provocative maintenance

prowler

pseudo

pseudoprime

pseudosuit

psychedelicware

psyton

pubic directory

puff

punched card

punt

Purple Book

purple wire

push

quad

quadruple bucky

quantifiers

quantum bogodynamics

quarter

ques

quick-and-dirty

quine

quote chapter and verse

quotient

quux

qux

QWERTY

rabbit job

rain dance

rainbow series

random

random numbers

randomness

rape

rare mode

raster blaster

raster burn

rat belt

rave

rave on!

ravs

raw mode

rc file

RE

read-only user

Reading Habits

README file

real

real estate

real hack

real operating system

Real Programmer

Real Soon Now

real time

real user

Real World

reality check

reaper

rectangle slinger

recursion

recursive acronym

Red Book

red wire

regexp

register dancing

reincarnation, cycle of

reinvent the wheel

Religion

religion of CHI

religious issues

replicator

reply

restriction

retcon

RETI

retrocomputing

return from the dead

Revision History

RFC

RFE

rib site

rice box

Right Thing

RL

roach

robot

robust

rococo

rogue

room-temperature IQ

root

root mode

rot13

rotary debugger

round tape

RSN

RTBM

RTFAQ

RTFB

RTFM

RTFS

RTI

RTM

RTS

rude

runes

runic

rusty iron

rusty memory

rusty wire

S/N ratio

sacred

saga

sagan

SAIL

salescritter

salt

salt mines

salt substrate

same-day service

samizdat

samurai

sandbender

sandbox

sanity check

Saturday-night special

say

scag

scanno

schroedinbug

science-fiction fandom

scram switch

scratch

scratch monkey

scream and die

screaming tty

screw

screwage

scribble

scrog

scrool

scrozzle

scruffies

SCSI

ScumOS

search-and-destroy mode

second-system effect

secondary damage

security through obscurity

SED

segfault

seggie

segment

segmentation fault

segv

self-reference

selvage

semi

semi-infinite

sendmail

senior bit

server

SEX

sex changer

Sexual Habits

shambolic link

shar file

sharchive

Share and enjoy!

shareware

shelfware

shell

shell out

shift left (or right) logical

shim

shitogram

short card

shotgun debugging

shovelware

showstopper

shriek

Shub-Internet

sidecar

SIG

sig block

sig quote

sig virus

signal-to-noise ratio

silicon

silly walk

silo

Silver Book

since time T equals minus infinity

sitename

skrog

skulker

slab

slack

slap on the side

slash

sleep

slim

slop

slopsucker

slurp

smart

smart terminal

smash case

smash the stack

smiley

smoke

smoke and mirrors

smoke test

smoking clover

SMOP

smurf

SNAFU principle

snail

snail-mail

snap

snarf

snarf & barf

snarf down

snark

sneaker

sneakernet

sniff

snivitz

Snow Crash

SO

social engineering

social science number

soft boot

softcopy

software bloat

software hoarding

software laser

software rot

softwarily

softy

some random X

sorcerer's apprentice mode

SOS

Soundalike slang

source of all good bits

space-cadet keyboard

spaceship operator

SPACEWAR

spaghetti code

spaghetti inheritance

spam

special-case

speedometer

spell

spelling flame

spiffy

spike

spin

spl

splash screen

splat

spod

spoiler

Spoken inarticulations

sponge

spool

spool file

square tape

squirrelcide

stack

stack puke

stale pointer bug

star out

state

stealth manager

steam-powered

stiffy

stir-fried random

stomp on

Stone Age

stone knives and bearskins

stoppage

```
store

strided

stroke

strudel

stubroutine

studly

studlycaps

stunning

stupid-sort

Stupids

Sturgeon's Law

sucking mud

sufficiently small

suit

suitable win

suitably small

sun lounge

sun-stools

sunspots

super source quench

superloser

superprogrammer

superuser

support

surf

Suzie COBOL

swab

swap
```

swap space

swapped in

swapped out

swizzle

sync

syntactic salt

syntactic sugar

sys-frog

sysadmin

sysape

sysop

system

system mangler

systems jock

SysVile

T

tail recursion

talk mode

talker system

tall card

tanked

TANSTAAFL

tar and feather

taste

tayste

TCB

TCP/IP

tea, ISO standard cup of

Technobabble

TechRef

TECO

tee

teledildonics

Telerat

TELNET

ten-finger interface

tense

tentacle

tenured graduate student

tera-

teraflop club

terminak

terminal brain death

terminal illness

terminal junkie

terpri

test

TeX

text

thanks in advance

That's not a bug, that's a feature!

The Computer Contradictionary

The Cuckoo's Egg

The Devouring Fungus

The Hitchhiker's Guide to the Galaxy

The Meaning of 'Hack'

The Soul of a New Machine

The Story of Mel, a Real Programmer

The Tao of Programming

the X that can be Y is not the true X

The '-P' convention

theology

theory

Things Hackers Detest and Avoid

thinko

This can't happen

This time, for sure!

thrash

thread

three-finger salute

thud

thumb

thunk

tick

tick-list features

tickle a bug

tiger team

time bomb

time sink

time T

times-or-divided-by

Tinkerbell program

tip of the ice-cube

tired iron

tits on a keyboard

TLA

TMRC

TMRCie

to a first approximation

to a zeroth approximation

toad

toast

toaster

toeprint

toggle

tool

toolsmith

topic drift

topic group

TOPS-10

TOPS-20

tourist

tourist information

touristic

toy

toy language

toy problem

toy program

trampoline

trap

trap door

trash

trawl

tree-killer

treeware

trit

trivial

troff

troglodyte

troglodyte mode

Trojan horse

troll

tron

True Names ... and Other Dangers

true-hacker

tty

tube

tube time

tunafish

tune

turbo nerd

Turing tar-pit

turist

TV Typewriters

tweak

tweeter

TWENEX

twiddle

twilight zone

twink

twirling baton

two pi

two-to-the-N

twonkie

u-

UBD

UN*X

undefined external reference

under the hood

undocumented feature

uninteresting

Unix

Unix brain damage

Unix conspiracy

Unix weenie

unixism

unswizzle

unwind the stack

unwind-protect

up

upload

upthread

urchin

URL

Usenet

user

user-friendly

user-obsequious

USG Unix

UTSL

UUCPNET

V7

vadding

vanilla

vannevar

vaporware

var

VAX

VAXectomy

VAXen

vaxherd

vaxism

vaxocentrism

vdiff

veeblefester

ventilator card

Venus flytrap

Verb Doubling

verbage

verbiage

Version 7

vgrep

vi

videotex

virgin

virtual

virtual Friday

virtual reality

virtual shredder

virus

visionary

VMS

voice

voice-net

voodoo programming

VR

Vulcan nerve pinch

vulture capitalist

wabbit

WAITS

waldo

walk

walk off the end of

walking drives

wall

wall follower

wall time

wallpaper

wango

wank

wannabee

war dialer

warez

warez d00dz

warlording

warm boot

wart

washing machine

washing software

water MIPS

wave a dead chicken

Weaknesses of the Hacker Personality

weasel

webmaster

wedged

wedgie

wedgitude

weeble

weeds

weenie

Weenix

well-behaved

well-connected

wetware

whack

whacker

whales

whalesong

What's a spline?

wheel

wheel bit

wheel wars

White Book

whizzy

wibble

WIBNI

widget

```
wiggles

WIMP environment

win

win big

win win

Winchester

window shopping

Windoze

winged comments

winkey

winnage

winner

winnitude

wired

wirehead

wirewater

wish list

within delta of

within epsilon of

wizard

Wizard Book

wizard mode

wizardly

wok-on-the-wall

womb box

WOMBAT

wonky

woofer
```

workaround

working as designed

worm

wormhole

wound around the axle

wrap around

write-only code

write-only language

write-only memory

Wrong Thing

wugga wugga

wumpus

WYSIAYG

WYSIWYG

X

XEROX PARC

XOFF

XON

xor

xref

XXX

xyzzy

YA-

YABA

YAFIYGI

YAUN

Yellow Book

yellow wire

Yet Another

```
YKYBHTLW

YMMV

You are not expected to understand thi

You know you've been hacking too long

Your mileage may vary

Yow!

yoyo mode

Yu-Shiang Whole Fish

zap

zapped

zen

zero

zero-content

zeroth

zigamorph

zip

zipperhead

zombie

zorch

Zork

zorkmid

\begin
```