

Network Working Group
Request for Comments: 3092
Category: Informational

D. Eastlake 3rd
Motorola
C. Manros
Xerox
E. Raymond
Open Source Initiative
1 April 2001

Etymology of "Foo"

Status of this Memo

This memo provides information for the Internet community. It does not specify an Internet standard of any kind. Distribution of this memo is unlimited.

Copyright Notice

Copyright (C) The Internet Society (2001). All Rights Reserved.

Abstract

Approximately 212 RFCs so far, starting with RFC 269, contain the terms 'foo', 'bar', or 'foobar' as metasyntactic variables without any proper explanation or definition. This document rectifies that deficiency.

Table of Contents

1. Introduction.....	1
2. Definition and Etymology.....	2
3. Acronyms.....	5
Appendix.....	7
Security Considerations.....	11
References.....	12
Authors' Addresses.....	13
Full Copyright Statement.....	14

1. Introduction

Approximately 212 RFCs, or about 7% of RFCs issued so far, starting with [RFC269], contain the terms 'foo', 'bar', or 'foobar' used as a metasyntactic variable without any proper explanation or definition. This may seem trivial, but a number of newcomers, especially if English is not their native language, have had problems in understanding the origin of those terms. This document rectifies that deficiency.

Section 2 below describes the definition and etymology of these words and Section 3 interprets them as acronyms.

As an Appendix, we include a table of RFC occurrences of these words as metasyntactic variables.

2. Definition and Etymology

bar /bar/ n. [JARGON]

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.

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 variables used in syntax examples (bar, baz, qux, quux, corge, grault, garply, waldo, fred, plugh, xyzzy, thud). [JARGON]

When used in connection with 'bar' it is generally traced to the WW II era Army slang acronym FUBAR ('Fucked Up Beyond All Repair'), later modified to foobar. Early versions of the Jargon File [JARGON] interpreted this change as a post-war bowdlerization, but it now seems more likely that FUBAR was itself a derivative of 'foo' perhaps influenced by German 'furchtbar' (terrible) - 'foobar' may actually have been the original form.

For, it seems, the word 'foo' itself had an immediate prewar history in comic strips and cartoons. In the 1938 Warner Brothers cartoon directed by Robert Clampett, "The Daffy Doc", a very early version of Daffy Duck holds up a sign saying "SILENCE IS FOO!" 'FOO' and 'BAR' also occurred in Walt Kelly's "Pogo" strips. The earliest documented uses were in the surrealist "Smokey Stover" comic strip by Bill Holman about a fireman. This comic strip appeared in various American comics including "Everybody's" between about 1930 and 1952. It frequently included the word "FOO" on license plates of cars, in nonsense sayings in the background of some frames such as "He who foos last foos best" or "Many smoke but foo men chew", and had Smokey say "Where there's foo, there's fire". Bill Holman, the author of the strip, filled it with odd jokes and personal contrivances, including other

nonsense phrases such as "Notary Sojac" and "1506 nix nix". According to the Warner Brothers Cartoon Companion [WBCC] Holman claimed to have found the word "foo" on the bottom of a Chinese figurine. This is plausible; Chinese statuettes often have apotropaic inscriptions, and this may have been 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") [PERS]. English speakers' reception of Holman's 'foo' nonsense word was undoubtedly influenced by Yiddish 'feh' and English 'foe' and 'fool'. [JARGON, FOLDOC]

Holman's strip featured a firetruck called the Foomobile that rode on two wheels. The comic strip was tremendously popular in the late 1930s, and legend has it that a manufacturer in Indiana even produced an operable version of Holman's Foomobile. According to the Encyclopedia of American Comics [EAC], 'Foo' fever swept the U.S., finding its way into popular songs and generating over 500 'Foo Clubs.' The fad left 'foo' references embedded in popular culture (including the couple of appearances in Warner Brothers cartoons of 1938-39) but with their origins rapidly forgotten. [JARGON]

One place they are known to have remained live is in the U.S. military during the WWII years. In 1944-45, the term 'foo fighters' [FF] was in use by radar operators 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 [BFF]). Informants connected the term to the Smokey Stover strip [PERS].

The U.S. and British militaries frequently swapped slang terms during the war. Period sources reported that 'FOO' became a semi-legendary subject of WWII British-army graffiti more or less equivalent to the American Kilroy [WORDS]. Where British troops went, the graffiti "FOO was here" or something similar showed up. Several slang dictionaries aver that FOO probably came from Forward Observation Officer, but this (like the contemporaneous "FUBAR") was probably a backronym [JARGON]. Forty years later, Paul Dickson's excellent book "Words" [WORDS] traced "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."

Earlier versions of the Jargon File 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. The Crumbs may also have been influenced by a short-lived Canadian parody magazine named 'Foo' published in 1951-52. [JARGON]

An old-time member reports that in the 1959 "Dictionary of the TMRC Language", compiled at TMRC (the Tech Model Railroad Club at MIT) there was an entry for Foo. The current on-line version, in which "Foo" is the only word coded to appear red, has the following [TMRC]:

Foo: The sacred syllable (FOO MANI PADME HUM); to be spoken only when under obligation to commune with the Deity. Our first obligation is to keep the Foo Counters turning.

This definition used Bill Holman's nonsense word, then only two decades old and demonstrably still live in popular culture and slang, to make a "ha ha only serious" analogy with esoteric Tibetan Buddhism. Today's hackers would find it difficult to resist elaborating a joke like that, and it is not likely 1959's were any less susceptible. [JARGON]

4. [EF] Prince Foo was the last ruler of Pheebor and owner of the Phee Helm, about 400 years before the reign of Entharion. When Foo was beheaded by someone he called an "eastern fop" from Borphee, the glorious age of Pheebor ended, and Borphee rose to the prominence it now enjoys.
5. [OED] A 13th-16th century usage for the devil or any other enemy. The earliest citation it gives is from the year 1366, Chaucer A B C (84): "Lat not our alder foo [devil] make his bobance [boast]". Chaucer's "Foo" is probably related to modern English "foe".
6. Rare species of dog.

A spitz-type dog discovered to exist after having long been considered extinct, the Chinese Foo Dog, or Sacred Dog of Sinkiang, may have originated through a crossing of Northern European hunting dogs and the ancient Chow Chow from Mongolia or be the missing link between the Chinese Wolf and the Chow Chow. It probably derives its name from foochow, of the kind or style

prevalent in Foochow, of or from the city of Foochow (now Minhow) in southeast China. [DOG]

foobar n.

[JARGON] A widely used metasyntactic variable; see foo for etymology. Probably originally propagated through DECsystem manuals by Digital Equipment Corporation (DEC) in 1960s and early 1970s; confirmed sightings there go back to 1972. Hackers do not generally use this to mean FUBAR in either the slang or jargon sense. It has been plausibly suggested that "foobar" spread among early computer engineers partly because of FUBAR and partly because "foo bar" parses in electronics techspeak as an inverted foo signal.

foo-fighter n.

World War II term for Unidentified Flying Objects (UFOs) noted by both German and British military. See [FF] and entry above for "foo".

3. Acronyms

The following information is derived primarily from the compilations at University Cork College <<http://www.ucc.ie/acronyms>> and Acronym Finder <<http://www.AcronymFinder.com>> generally filtered for computer usage.

.bar:

Generic file extension which is not meant to imply anything about the file type.

BAR:

Base Address Register

Buffer Address Register

FOO:

Forward Observation Observer.

FOO Of Oberlin. An organization whose name is a recursive acronym. Motto: The FOO, the Proud, the FOO. See <<http://cs.oberlin.edu/students/jmankoff/FOO/home.html>>.

File Open for Output. An NFILE error code [RFC1037].

FOOBAR:

FTP Operation Over Big Address Records [RFC1639]. (Particularly appropriate given that the first RFC to use "foo", [RFC269], was also about file transfer.)

FUBAR:

Failed UniBus Address Register - in a VAX, from Digital Equipment Corporation Engineering.

Fucked Up Beyond All Recognition/Repair - From US Military in World War II. Sometimes sanitized to "Fouled Up ...".

FUBARD - Past tense of FUBAR.

Appendix

Below is a table of RFC occurrences of these words as metasyntactic variables. (This excludes other uses that are reasonably clear like "vertical bar" or "bar BoF".) Many of these uses are for example domain names. That usage may decrease with the specification in [RFC 2606] of a Best Current Practice for example domain names.

RFC#	bar	foo	foo.bar foobar	fubar	#
269	X	X			1
441	X	X			2
614		X			3
686		X			4
691		X			5
733	X	X			6
742		X			7
743	X	X			8
756		X			9
765	X	X			10
772	X	X		X	11
775			X		12
780	X	X		X	13
788	X	X			14
810	X	X	X		15
819		X			16
821	X	X			17
822	X	X			18
882	X	X			19
883		X			20
897	X	X			21
913		X			22
921	X	X			23
934		X			24
952	X	X	X		25
959			X		26
976			X		27
977		X	X		28
987			X		29
1013		X			30
1033	X	X			31
1035		X			32
1037		X			33
1056	X	X	X		34
1068		X			35
1137			X		36

1138		X	X		37
1148		X	X		38
1173			X		39
1176			X		40
1186		X			41
1194		X			42
1196		X			43
1203		X	X		44
1288		X			45
1291		X			46
1309		X			47
1327		X	X		48
1341	X	X	X		49
1343		X	X		50
1344		X			51
1348			X		52
1386		X			53
1408		X			54
1411		X			55
1412		X			56
1459	X	X	X	X	57
1480		X			58
1505		X			59
1519		X			60
1521	X	X			61
1523		X			62
1524		X	X		63
1526	X	X			64
1535	X	X	X		65
1536	X		X		66
1537		X	X		67
1563		X			68
1564			X		69
1572		X			70
1573		X			71
1622		X			72
1635			X		73
1636		X	X		74
1642		X			75
1645			X		76
1649		X			77
1664			X		78
1681			X		79
1697		X			80
1716		X			81
1718		X			82
1730	X	X	X		83
1734			X		84

1738		X		85
1783			X	86
1784			X	87
1786	X	X		88
1813	X	X		89
1835		X	X	90
1856			X	91
1861			X	92
1866		X		93
1894			X	94
1896		X		95
1898		X		96
1913		X	X	97
1945	X	X		98
1985		X	X	99
2015	X	X		100
2017		X		101
2033	X	X		102
2045			X	103
2046	X	X		104
2049	X	X		105
2055		X		106
2060	X	X	X	107
2065		X		108
2068			X	109
2071		X		110
2088			X	111
2109		X		112
2110		X	X	113
2111	X	X	X	114
2141		X		115
2150		X		116
2152		X		117
2156		X	X	118
2163			X	119
2167			X	120
2168			X	121
2169			X	122
2180	X	X		123
2193	X	X		124
2224		X		125
2227	X	X		126
2233		X		127
2234	X	X	X	128
2243		X		129
2255		X	X	130
2280	X	X		131
2295		X		132

2302		X		133
2311	X			134
2326	X	X	X	135
2342		X		136
2348			X	137
2349			X	138
2359			X	139
2369	X	X	X	140
2378		X		141
2384			X	142
2392	X	X	X	143
2396			X	144
2401			X	145
2407			X	146
2421		X		147
2425			X	148
2434		X		149
2446		X	X	150
2447	X	X		151
2458		X	X	152
2459			X	153
2476		X		154
2483	X	X		155
2486		X		156
2505	X	X		157
2518	X	X	X	158
2535		X		159
2538		X		160
2543	X	X	X	161
2554			X	162
2557		X	X	163
2565		X	X	164
2569	X	X		165
2593	X	X		166
2595		X		167
2608		X		168
2609		X		169
2616	X	X	X	170
2622	X	X		171
2626		X		172
2633	X			173
2640		X	X	174
2645			X	175
2650	X			176
2659			X	177
2673		X	X	178
2693		X		179
2704	X	X		180

2705	X	X			181
2717		X	X		182
2725	X	X			183
2731	X	X	X		184
2732		X			185
2782		X	X		186
2803		X			187
2806		X			188
2812	X	X	X	X	189
2818	X	X			190
2828		X	X		191
2830	X				192
2831	X	X	X		193
2839		X			194
2846	X	X			195
2853		X			196
2863		X			197
2910		X	X		198
2912		X	X		199
2915		X			200
2926			X		201
2942		X			202
2965		X			203
2967	X	X	X		204
2970		X			205
2993	X	X			206
3010	X	X			207
3023		X			208
3028		X			209
3075	X	X			210
3080		X			211
3092	X	X	X	X	212
+-----+-----+-----+-----+-----+-----+					
RFC#	bar	foo	foo.bar foobar	fubar	#
+-----+-----+-----+-----+-----+-----+					

Security Considerations

Security issues are not discussed in this memo.

References

- [BFF] "Best of Foo Fighters: Signature Licks", Troy Stetina, Foo Fighters, October 2000, Hal Leonard Publishing Corporation, ISBN 063401470.
- [DOG] <<http://www.rarebreed.com/breeds/foo/foo.html>>.
- [EAC] "Encyclopedia of American Comics", Ron Goulart, 1990, Facts on File.
- [EF] "Encyclopedia Frobozzica",
<<http://www.everything2.com/index.pl?node=Prince%20Foo>>
- [FF] Foo Fighters - "The Rainbow Conspiracy", Brad Steiger, Sherry Hansen Steiger, December 1998, Kensington Publishing Corp., ISBN 1575663635. - Computer UFO Network
<<http://www.cufon.org>> particularly
<<http://www.cufon.org/cufon/foo.htm>>.
- [FOLDOC] "Free On-Line Dictionary Of Computing",
<<http://www.foldoc.org>>.
- [JARGON] The Jargon File. See <<http://www.jargon.org>>. Last printed as "The New Hacker's Dictionary", Eric S. Raymond, 3rd Edition, MIT Press, ISBN 0-262-68092-0, 1996.
- [OED] "The Oxford English Dictionary", J. A. Simpson, 1989, Oxford University Press, ISBN 0198611862.
- [PERS] Personal communications.
- [RFC269] Brodie, H., "Some Experience with File Transfer", RFC 269, December 1971.
- [RFC1037] Greenberg, B. and S. Keene, "NFILE - A File Access Protocol", RFC 1037, December 1987.
- [RFC1639] Piscitello, D., "FTP Operation Over Big Address Records (FOOBAR)", RFC 1639, June 1994.
- [RFC2606] Eastlake, D. and A. Panitz, "Reserved Top Level DNS Names", BCP 32, RFC 2606, June 1999.

- [TMRC] The Tech Model Railroad Club (The Model Railroad Club of the Massachusetts Institute of Technology) Dictionary, <<http://tmrc-www.mit.edu/dictionary.html>>.
- [WBCC] "Warner Brothers Cartoon Companion", <<http://members.aol.com/EOCostello/>>.
- [WORDS] "Words", Paul Dickson, ISBN 0-440-52260-7, Dell, 1982.

Authors' Addresses

The authors of this document are:

Donald E. Eastlake 3rd
Motorola
155 Beaver Street
Milford, MA 01757 USA

Phone: +1 508-261-5434 (w)
+1 508-634-2066 (h)
Fax: +1 508-261-4777 (w)
EMail: Donald.Eastlake@motorola.com

Carl-Uno Manros
Xerox Corporation
701 Aviation Blvd.
El Segundo, CA 90245 USA

Phone: +1 310-333-8273
Fax: +1 310-333-5514
EMail: manros@cp10.es.xerox.com

Eric S. Raymond
Open Source Initiative
6 Karen Drive
Malvern, PA 19355

Phone: +1 610-296-5718
EMail: esr@thyrsus.com

Full Copyright Statement

Copyright (C) The Internet Society (2001). All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the Internet Society or other Internet organizations, except as needed for the purpose of developing Internet standards in which case the procedures for copyrights defined in the Internet Standards process must be followed, or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by the Internet Society or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Acknowledgement

Funding for the RFC Editor function is currently provided by the Internet Society.

