"Free," "Free," and "Open Source?"

In the 70s, computer users lost the freedoms to redistribute and change software because they didn't value their freedom. Computer users regained these freedoms in the 80s and 90s because a group of idealists, the GNU Project, believed that freedom is what makes a program better, and were willing to work for what we believed in.

-Richard M Stallman¹

ree software by any other name would give you the same freedom," notes the Free Software Foundation's Richard Stallman, but free software isn't a matter of price (see figure 1).² Think "free speech," not "free beer."

Still, in 1998, Eric Raymond was among those looking for ways to promote free software. Based in part on Raymond's article "The Cathedral and the Bazaar," Netscape's CEO Jim Barksdale had recently made the decision to open up the source code to the Netscape Communicator Web browser, a sign that free software might be gaining a toehold in commercial businesses. Raymond writes:

The real conceptual breakthrough, though, was admitting to ourselves that what we needed to mount was in effect a marketing campaign—and that it would require marketing techniques (spin, image-building, and rebranding) to make it work.³

And so "open source," a term proposed by Christine Peterson of the Foresight Institute, was born.⁴ VA Linux founder Larry Augustin explained, "We wanted to emphasize that the software was open and that the source code was available."⁵

But, as Open Source Definition author Bruce Perens notes, "Open source doesn't just mean access to the source code," though that is a necessary condition.⁶ And OSS does not necessarily need to be free to download, nor is all freely downloadable software open source.

And open source certainly doesn't mean the software is in the public domain.

Indeed, the GNU General Public License (GPL) that is used for a majority of open-source software projects specifically uses copyright protections to guarantee the freedoms set forth by the Free Software Foundation: the right to "run, copy, distribute, study, change, and improve the software."⁷

An especially effective provision of the GPL is "copyleft." Copyleft protects the property rights of those who contribute to GPL software by requiring that all modifications and derivatives of the software also be released under a GPL.⁸

The effect of this can be seen in larger scale in the progress of Web development. Most Web pages are not licensed under the GPL, but the source code that forms those pages is nonetheless available using the "view source" command in almost every Web browser. Writer and NYU professor Clay Shirky explains:

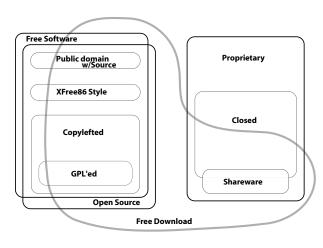


Figure 1:

Not all software that can be downloaded for free is Free software.

The single factor most responsible for [the] riot of experimentation [seen on the Web] is transparency—the ability of any user to render into source code the choices made by any other designer. Once someone has worked out some design challenge, anyone else should be able to adopt, modify it, and make that modified version available, and so on.

Consider how effortless it would have been for Tim Berners-Lee or Marc Andreeson to treat the browser's "View Source . . ." as a kind of debugging option which could have been disabled in any public release of their respective browsers, and imagine how much such a 'hidden source' choice would have hampered this feedback loop between designers. Instead, with this unprecedented transparency of the HTML itself, we got an enormous increase in the speed of design development. When faced with a Web page whose layout or technique seems particularly worth emulating or even copying outright, the question "How did they do that?" can be answered in seconds.⁹

In this, Web designers share much with fashion designers. "For most of the fashion industry copying is a way of life, and it's legal, sort of," notes NPR's Rick Karr.¹⁰ Laurie Racine, cofounder of Public Knowledge, describes fashion as a \$335 billion industry "built on a copyrightfree model."¹¹

But there is really no legal protection for borrowing big collars and lapels from 1970s jackets, and while Shirky's point stands as a historical fact of the technology, there's no legal protection for that either. And that's one of the concerns the Free Software Foundation's Peter Brown wants to point out: "It's not just about access, it's about learning."¹²

"Open source" adherents seek to emphasize the economic benefits, while "free software" advocates promote its rights and freedoms, but both groups point to the same basic tenets:¹³

- the right to make copies of the program, and distribute those copies
- the right to have access to the software's source code, a necessary preliminary before you can change it
- the right to make improvements to the program

"Nearly all open source software is free software; the two terms describe almost the same category of software," explains the Free Software Foundation's Richard Stallman, who goes on to say that "open source is a development methodology; free software is a social movement."¹⁴ Not to be deterred, "Cathedral and the Bazaar" author Eric Raymond suggests that "an entirely sufficient case for open-source development rests on its engineering and economic outcomes—better quality, higher reliability, lower costs, and increased choice."¹⁵ And both groups agree they represent two sides of the same coin: the Free Software Foundation's Peter Brown is quick to point out the positive economic outcomes of free software, and the Open Source Definition itself acknowledges the importance of freedom in achieving the benefits of open source.¹⁶

Notes

- Richard M. Stallman, "Linux, GNU, and Freedom," GNU Operating System Web site, www.gnu.org/philosophy -linux-gnu-freedom.html (accessed Mar. 19, 2007).
- 2. Richard M. Stallman, "Why 'Free Software' Is Better Than 'Open Source,'" Free Software Foundation Web site, www .fsf.org/licensing/essays/free-software-for-freedom.html (accessed Mar. 19, 2007); Diagram in figure 1 by Chao-Kuei, this version from Wikipedia, http//en.wikipedia.org/wiki/ image:GPL_and_open-source.svg. The FSF and Wikipedia pages on which the diagram appears assert that the work is copyrighted and the copyright holder allows anyone to use it for any purpose, provided that the following copyright notice is preserved: Copyright © 1996, 1997, 1998, 2001 Free Software Foundation, Inc., 51 Franklin St., Fifth Floor, Boston, MA 02110 USA.
- Eric Steven Raymond, "The Origins of 'Open Source," in *Revenge of the Hackers*, version 1.9, Aug. 2000, available online at www.catb.org/~esr/writings/cathedral-bazaar/ hacker-revenge/ar01s05.html (accessed Mar. 19, 2007).
- "History of the OSI," on the Open Source Initiative Web site, www.opensource.org/docs/history.php (accessed Mar. 19, 2007); "Open-Source Software," Wikipedia, http:// en.wikipedia.org/wiki/Open_source_software (accessed Mar. 19, 2007).
- Larry Augustin, interviewed in *Revolution OS*, DVD, documentary by J. T. S. Moore (Wonderview Productions, 2001).
- Bruce Perens, "The Open Source Definition," available online at http://perens.com/OSD.html (accessed Mar. 19, 2007).
- "License Breakdown," on the Stats page of the Freshmeat Web site, http://freshmeat.net/stats (accessed Mar. 19, 2007); "The Basics About Copyright and Licensing," Free Software Foundation Web site, www.fsf.org/blogs/ licensing/20050325novalis.html (accessed Mar. 19, 2007); Eben Moglen, "Why the FSF Gets Copyright Assignments From Contributors," Feb. 12, 2005, Free Software Foundation Web site, www.fsf.org/licensing/licenses/why -assign.html (accessed Mar. 19, 2007); "The Free Software Definition," Free Software Foundation Web site, www .fsf.org/licensing/essays/free-sw.html (accessed Mar. 19, 2007).

- 8 "What Is Copyleft?" GNU Operating System Web site, www .gnu.org/copyleft/copyleft.html (accessed Mar. 19, 2007).
- "View Source... Lessons From the Web's Massively Parallel Development," first published April 1998, available on the Web site *Clay Shirky's Writings About the Internet*, www .shirky.com/writings/view_source.html (accessed Mar. 19, 2007).
- Rick Karr, "Fashion Industry Copes with Designer Knockoffs," first broadcast Sept. 18, 2003, on *Morning Edition* on National Public Radio, available on the NPR Web site at www.npr.org/templates/story/story .php?storyId=1434815 (accessed Mar. 19, 2007).
- Laurie Racine, "Copyrighting Fashion: A Misguided Notion," *Laurie Racine's Blog*, Aug. 3, 2006, on the Public Knowledge Web site, www.publicknowledge.org/blog/6 (accessed Mar. 19, 2007).
- 12. Peter Brown, phone interview by the author, Mar. 6, 2007.

- Perens, "The Open Source Definition"; "Why 'Free Software' Is Better Than 'Open Source," Free Software Foundation Web site, www.fsf.org/licensing/essays/free -software-for-freedom.html (accessed Mar. 19, 2007).
- Richard Stallman, "Why 'Open Source' Misses the Point of Free Software," GNU Operating System Web site, www .gnu.org/philosophy/open-source-misses-the-point.html (accessed Mar. 19, 2007).
- Eric Steven Raymond, "Beyond Geeks Bearing Gifts," in *The Magic Cauldron*, June 1999, available online at www .catb.org/~esr/writings/magic-cauldron/magic-cauldron -2.html (accessed Mar. 19, 2007).
- Brown interview; Perens, "The Open Source Definition"; "Debian Social Contract," version 1.1, Apr. 26, 2004, available on the Debian Web site, www.debian.org/social _contract (accessed Mar. 19, 2007).