CURRENCY

THE GNU MANIFESTO TURNS THIRTY

By Maria Bustillos

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Unix, one of the earliest computer-operating systems, was developed between the late nineteen-sixties and the early nineteen-eighties, by A.T. & T. Bell Laboratories and various universities around the world, notably the University of California, Berkeley. It was the product of a highly collaborative process, in which researchers and students built and shared their code in an atmosphere of excitement and discovery that was fostered, in part, by an agreement that A.T. & T. representatives had signed, in 1956, with the Department of Justice, circumscribing the company's commercial activities in exchange for an end to antitrust proceedings. But in 1982, A.T. & T. was broken up and its agreement with the department ended; before long, the company was selling copies of Unix without including the source code from which it was derived, effectively commercializing the operating system and hiding its building blocks within a proprietary program. The move greatly upset many in the programming community, including Richard Stallman, a software developer in his late twenties who was then working at M.I.T.'s Artificial Intelligence Laboratory.

Richard Stallman, who published his manifesto in March of 1985, has been known to say that, "with software, either the users control the program, or the program controls the users." Photograph by Denis Allard / REA / Redux

Stallman was uneasy over the increasing encroachment of proprietary software. He'd seen evidence of it in his own lab, when he found himself unable to adapt a new Xerox printer with a program he'd created to alert users to paper jams, and he believed that he had an obligation to protect and nurture the hacker ethos he'd experienced at M.I.T., which valued intellectual curiosity, esprit de corps, and fun over profit. In late 1983, he posted to two newsgroup discussion forums an idea to create an alternative to Unix. "If I get donations of money, I may be able to hire a few people full or part time," he wrote. "The salary won't be high, but I'm looking for people for whom knowing they are helping humanity is as important as money."

Stallman expanded and formalized his ideas in the GNU Manifesto, which he published in the March, 1985, issue of *Dr. Dobb's Journal of Software Tools*, thirty years ago this month. "So that I can continue to use computers without dishonor," he wrote, "I have decided to put together a sufficient body of free software so that I will be able to get along without any software that is not free. I have resigned from the AI Lab to deny MIT any legal excuse to prevent me from giving GNU away." The nearly forty-five-hundred-word text called for collaborators to help build a freely shareable Unix-like operating system, and set forth an innovative method to insure its legal protection.

The GNU Manifesto is characteristic of its author—deceptively simple, lucid, explicitly left-leaning, and entirely uncompromising. He explains the point of the project in short, declarative sentences: "[A] user who needs changes in the system will always be free to make them himself, or hire any available programmer or company to make them for him. Users will no longer be at the mercy of one programmer or company which owns the sources and is in [the] sole position to make changes." The document is also funny, in keeping with the playful traditions of early hackers. For instance, GNU (pronounced "guh-NOO," with a hard "g") is a recursive acronym, spelling out "GNU's Not Unix."

Stallman was one of the first to grasp that, if commercial entities were going to own the methods and technologies that controlled computers, then computer users would inevitably become beholden to those entities. This has come to pass, and in spades. Most computer users have become dependent on proprietary code provided by companies like Apple, Facebook, and Google, the use of which comes with conditions we may not condone or even know about, and can't control; we have forfeited the freedom to adapt such code according to our needs, preferences, and personal ethics. "With software," Stallman still frequently observes, "either the users control the program, or the program controls the users."

Thus, the "free" in "free software" refers to freedom, not cost—a distinction that is key to understanding Stallman's career. A few months after publishing the GNU Manifesto, he founded the Free Software Foundation, of which he is still the president. "Proprietary software was the norm when I started the GNU project in 1983," he told me by phone. "It was because you could no longer get a computer that you could run with free software."

Now, as a direct result of his work, you can. A home system running exclusively free software today might include, in addition to a GNU/Linux operating system, LibreOffice instead of Microsoft Office, GIMP rather than Photoshop, and the IceCat browser in place of Chrome or Internet Explorer. There is a free version of nearly every software program in common use; more than eight thousand are currently listed in the Free Software Foundation's program directory. While few such programs are as popular as their proprietary counterparts, interest in free software has increased alongside rising concerns about privacy, as well as about corporate and governmental control over media, culture, and commerce. (A few weeks ago, the technology writer Dan Gillmor published a widely shared piece on Medium about his own efforts toward adopting such a free system.)

Perhaps the most significant innovation in the GNU Manifesto is a method of rights protection known as "copyleft," which gave rise to GNU GPL software licenses, the first of which was issued in 1989. Under a GPL license, you are free to use, study, modify, and share a software program according to your own wishes, provided (and this is the important part) that any works you make from it are shared on the same terms; you can't conceal any of it, as A.T. & T. did with Unix. The idea borrows from existing copyright law, but grants protection to users, rather than authors. Stallman wrote:

GNU is not in the public domain. Everyone will be permitted to modify and redistribute GNU, but no distributor will be allowed to restrict its further redistribution. That is to say, proprietary modifications will not be allowed. I want to make sure that all versions of GNU remain free.

Copyleft licenses differ from other software licenses, such as Berkeley Software Distribution (BSD) ones, which also came into use in the late nineteen-eighties, and which impose no such restrictions on proprietary modifications. Such licenses are commonly known as "permissive"—but this means, in a sense, that they permit the future commercial exploitation of users, whose right to copy and share a software work can be restricted by those who make use of it later. (GPL licenses do allow developers to profit from their work; the publishing platform WordPress, for example, is licensed under GPL, and has a for-profit arm.)

The first complete free-software operating system became available in 1991, with the publication by Linus Torvalds of the Linux kernel. The "kernel" of a computing system controls its most basic functions, like memory management and the scheduling of tasks. A GNU kernel called the Hurd had long been in development, but had never achieved a stable release. The developer Jeb Boniakowski told me: "Meanwhile, some kid in Finland ... reads a book on operating systems and looks at GNU and he says 'Shit, all these guys are missing is a kernel.' And so he hacks out Linux. Which was an absolute pile of garbage, clumsily written and using a grossly outdated design. But it worked. It did stuff. It was free in both senses of the word." By combining the Linux kernel with the extant GNU programs—text editor, compiler, debugger, and many other tools and utilities, many of which Stallman wrote himself—it again became possible to run a computer using only freely modifiable, shareable software: the GNU/Linux system, now often known simply as Linux, though the full term is more accurate.

Despite the achievement, a rift soon opened in the free-software movement, giving rise to the "open source" camp. In 1994, Netscape released Navigator, a Web browser whose rapid adoption demonstrated the coming economic importance of the Internet. The pitch of the surrounding debates rose accordingly. In 1998, as the Web began to explode, Netscape, which was rapidly losing market share to Microsoft's Internet Explorer browser, decided to release the source code for Navigator, hoping thereby to capitalize on innovations drawn from the broader developer community. The newly formed Open Source Initiative held a conference in response to this move, calling on developers to "dump the moralizing and confrontational attitude that had been associated with 'free software' in the past and sell the idea strictly on the same pragmatic, business-case grounds that had motivated Netscape." Stallman was not invited to the conference, nor to the Open Source Summit held later that year.

"Business-case grounds" often meant advocating for the development of proprietary software in tandem with free software. Developers who released software under lax free licenses, without copyleft, all joined the open-source camp, along with some others who released under GNU GPL. Many new structures for the commercial distribution of software were introduced as a result: for example, some in the open-source camp released non-free software products alongside free teaser versions that intentionally omitted some features. In effect, these early meetings of the open-source movement amounted to a call for companies to gather, make private, and "monetize," in future, the efforts of all available contributors—putatively in the name of progress and standardization.* "The people who started using the term 'open source' wanted to suck up to business. They said so!" Stallman told

me, adding that companies that tout open-source principles often "seduce our community to release free software without copyleft."

The entrepreneur and venture capitalist Tim O'Reilly, who is today the most visible representative of the open-source movement, told me that he considers an open-source license to be freer than a GPL one, because it imposes no restrictions on those who seek to make use of code. "I think the BSD-style licenses are both more effective at creating more value in the world, and a better morality," he said. "Richard's sort of like an Old Testament prophet, with lots of 'Thou shalt not,' and BSD is a more Christian approach, saying, 'Love your neighbor; make value for the world. Let the people do with it what they will!' "

Though proprietary and open-source software publishers might appear at the moment to have the upper hand, Stallman's influence with developers (among whom he is known simply by his initials, "rms") remains immense. When I asked around about him, many people spoke of him as one might of a beloved but eccentric and prickly uncle. They would roll their eyes a bit, then hasten to add, as more than one did, "But he's *right* about most things." I told Stallman that I'd spoken with several developers who venerate his work, and who had even said that without it the course of their lives might have been altered. But they don't seem to do what you say, I observed; they all have iPhones. "I don't understand that either," he said. "If they don't realize that they need to defend their freedom, soon they won't have any."

Stallman does not own a cell phone, nor does he use Facebook, Twitter, or many of the programs most of us take for granted. "Flash Player tracks users and has DRM [Digital Rights Management]. Skype is designed for the NSA to snoop," he wrote in an e-mail. The message was prefaced, like every e-mail he sends, with a preamble addressed to the National Security Agency and the Federal Bureau of Investigation:

[[[To any NSA and FBI agents reading my email: please consider]]]
[[[whether defending the US Constitution against all enemies,]]]
[[[foreign or domestic, requires you to follow Snowden's example.]]]

He does not confine his demands for principled behavior to potential whistleblowers. During our phone conversation and several e-mail exchanges, he was unstinting in his use of the words "right" and "wrong," and nearly all of his voluminous writings, talks, and interviews (and e-mails to journalists, so far as I am able to determine) insist that his listeners or readers behave differently, and better.

Nowadays, he spends much of his time flying around the world, giving speeches and continuing to spread the message of the GNU Manifesto. Prior to such engagements, his office sends a ten-thousand-word document to prepare his hosts for his arrival, which makes for oddly charming reading. (He loves good food, folk dancing, and beautiful landscapes; he hates avocados, dislikes hotels, and is indifferent to wine. Also, don't buy him a parrot!)

Though Stallman's free-software dream is far from widespread, his ideas are succeeding by many measures. Government agencies, schools, and businesses around the world use free software, and parties as diverse as the Internet Archive, CERN, Wikipedia, the International Space Station, and the actor Stephen Fry have adopted GNU/Linux systems. It's very easy to believe that, had he cared to try, Stallman might have become as rich as Steve Jobs, Larry Ellison, Bill Gates, or any other Silicon Valley nabob.

What does happiness signify to you, I asked him, if it isn't based on wealth and comfort?

"Happiness for me is a combination of feeling good about myself and having love," he said. "And to feel good about myself, I have to do things that convince me I deserve it."

When I asked him whether his message is received more readily in countries with a stronger political left, he said, "Yes, it is. Basically, Americans have shown that they are politically naïve. If you look at how successful plutocratic candidates are in the U.S.—you can get Americans to vote to give their money to the rich. You have to just say certain predictable, silly things to them, and most of them will be fooled."

He paused for a moment, then added, "The point is, even though it's sad to see people being foolish, there's no use giving up. Nothing good can come of giving up. That just means you lose completely, right away."

**Clarification: This post has been amended to clarify the relationship between permissive software licenses and the open-source and free-software movements.*

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