

REVIEWS

Sam Williams, *Free as in Freedom: Richard Stallman's Crusade for Free Software*

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DIGITAL COMMONS

The following passage appears very rarely in the copyright notice of a printed book:

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation Licence, Version 1.1 or any later version published by the Free Software Foundation.

It is to be found on the opening page of a new biography of the free-software programmer and activist, Richard Stallman, and (as the epilogue recounts) the unusual arrangement under which it is published is due to his stern insistence. The notice means what it says: anyone is free to copy, change and disseminate the book, provided they obey a set of rules, of which the most important are (a) that they must reproduce invariant portions of the text, protecting the recognition of its author, and (b) that any modified or copied text be subject to the same GFD licence. Furthermore, from June 2002, Sam Williams plans to publish the biography on the website www.faiozilla.org, where readers

can help to improve the work, or create a personalized version . . . We realize there are many technical details in this story that may benefit from additional or refined information. As this book is released under the GFDL, we are accepting patches just like we would with any free software program. Accepted changes will be posted electronically and will eventually be incorporated into future printed versions of this work.

As the book makes plain, Stallman is an extraordinary figure—a programmer of surpassing skill, capable of matching the output of entire commercial teams with his spare, elegant code; and a tireless, principled and uncompromising activist who initiated and fostered the notion of a data commons. Stallman not only developed the conceptual details of what has become known as ‘copyleft’ (it is sometimes indicated with a reversed © symbol), creating public-ownership licences that cover software and documents, but he also laboured to produce the fundamental elements of a free-software operating system—a no-cost alternative to Windows, Mac OS and the rest, which anyone could download and improve. It was Stallman who, in the eighties, initiated and led work on a free-software version of Unix, which he dubbed GNU (a typically recursive programmer’s joke, this, the initials standing for GNU’s Not Unix). The extraordinary ambition to realize such a system was finally achieved using elements of GNU alongside a kernel written—as a stop-gap, originally—by Linus Torvalds, and developed into the Linux system; which, thanks to the efforts of thousands of collaborators internationally, has become a threat to Microsoft’s monopoly.

With his waist-length hair, flowing beard, brown polyester trousers and ill-matched T-shirts, Stallman himself is quite a contrast to Seattle’s Digital Godfather. Born in 1953 he was, according to his mother, devouring calculus textbooks by the age of seven. Educated in New York’s state schools, supplemented by Saturday sessions at the Columbia Honours Programme, he initially led the isolated existence of a mathematical wunderkind, reading science fiction and MAD magazine, alienated from the 1960s protest movements. Studying mathematics at Harvard, he found his way to the Artificial Intelligence laboratory at MIT, and moved there for his postgraduate work. (Though officially independent of the Institute now, Stallman still operates out of 545 Tech Square.)

It was at the AI lab that Stallman came into his own. There he found a tight-knit, highly collaborative group of dedicated hackers who exchanged information freely, working within egalitarian and informal structures. Openness was central to their ethos, and was defended vigorously and practically—by breaking into offices where terminals had been left idle behind locked doors, for instance. Stallman even fought against the use of passwords.

In the 1970s these programmers would freely exchange and tailor pre-compiled source codes, improving and customizing them to suit their requirements. From the turn of the 1980s, as the use of computers spread and software became a valuable commodity, companies copyrighted their programs and withdrew the source codes from the public domain. For programmers like Stallman, this was an assault on what they most cared about, as material that they had worked on for years was snatched from their grasp—an act analogous to the enclosure of common land. Stallman swiftly arrived at a strong position opposing this development: he would not use software that he was not allowed to alter or give to others. Computer codes were not scarce in the way that material

goods were. Stallman likened them to recipes: to prevent people from swapping them, or tinkering with them to suit their tastes, was authoritarian, morally wrong, and a pollution of once open and collaborative social relations.

Stallman argues that while companies address the issue of software control only from the point of view of maximizing profits, the community of hackers has a quite different perspective: 'What kind of rules make possible a good society that is good for the people in it?'. The idea of free software is not that programmers should make no money from their efforts—indeed, fortunes have been made—but that it is wrong that the commercial software market is set up solely to make as much money as possible for the companies that employ them.

Free software has a number of advantages. It allows communities of users to alter code so that it evolves to become economical and bugless, and adapts to rapidly changing technologies. It allows those with specialist needs to restructure codes to meet their requirements. Given that programs have to run in conjunction with each other, it is important for those who work on them to be able to examine existing code, particularly that of operating systems—indeed, many think that one of the ways in which Microsoft has maintained its dominance has been because its programmers working on, say, Office have privileged access to Windows code. Above all, free software allows access on the basis of need rather than ability to pay. These considerations, together with a revulsion at the greed and cynicism of the software giants, have attracted many people to the project. Effective communities offering advice and information have grown up to support users and programmers.

The free exchange of software has led some commentators to compare the online gift economy with the ceremony of potlatch, in which people bestow extravagant presents, or even sacrifice goods, to raise their prestige. Yet there is a fundamental distinction between the two, since the copying and distribution of software is almost cost-free—at least if one excludes the large initial outlay for a computer and networking facilities. If a programmer gives away the program that they have written, the expenditure involved is the time taken to write it—any number of people can have a copy without the inventor being materially poorer.

An ideological tussle has broken out in this field between idealists, represented by Stallman, who want software to be really free, and the pragmatists, who would rather not frighten the corporations. The term 'free', Eric Raymond argues in his book *The Cathedral and the Bazaar*, is associated with hostility to intellectual property rights—even with communism. Instead, he prefers the 'open source' approach, which would replace such sour thoughts with 'pragmatic tales, sweet to managers' and investors' ears, of higher reliability and lower cost and better features'. For Raymond, the system in which open-source software such as Linux is produced approximates to the ideal free-market condition, in which selfish agents maximize their own utility and thereby create a spontaneous, self-correcting order: programmers compete to make the most efficient

code, and ‘the social milieu selects ruthlessly for competence’. While programmers may appear to be selflessly offering the gift of their work, their altruism masks the self-interested pursuit of prestige in the hacker community.

In complete contrast, others have extolled the ‘communism’ of such an arrangement. Although free software is not explicitly mentioned, it does seem to be behind the argument of Hardt and Negri’s *Empire* that the new mode of computer-mediated production makes ‘cooperation completely immanent to the labour activity itself’. People need each other to create value, but these others are no longer necessarily provided by capital and its organizational powers. Rather, it is communities that produce and, as they do so, reproduce and redefine themselves; the outcome is no less than ‘the potential for a kind of spontaneous and elementary communism’. As Richard Barbrook pointed out in his controversial nettime posting, ‘Cyber Communism’, the situation is certainly one that Marx would have found familiar: the forces of production have come into conflict with the existing relations of production. The free-software economy combines elements associated with both communism and the free market, for goods are free, communities of developers altruistically support users, and openness and collaboration are essential to the continued functioning of the system. Money can be made but need not be, and the whole is protected and sustained by a hacked capitalist legal tool—copyright.

The result is a widening digital commons: Stallman’s General Public Licence uses copyright—or left—to lock software into communal ownership. Since all derivative versions must themselves be ‘copylefted’ (even those that carry only a tiny fragment of the original code) the commons grows, and free software spreads like a virus—or, in the comment of a rattled Microsoft executive, like cancer. Elsewhere, a Microsoft vice-president has complained that the introduction of GPLs ‘fundamentally undermines the independent commercial-software sector because it effectively makes it impossible to distribute software on a basis where recipients pay for the product’ rather than just the distribution costs.

Asked about his wider political convictions, Stallman replies:

I hesitate to exaggerate the importance of this little puddle of freedom . . . Because the more well-known and conventional areas of working for freedom and a better society are tremendously important. I wouldn’t say that free software is as important as they are. It’s the responsibility I undertook, because it dropped in my lap and I saw a way I could do something about it. But, for example, to end police brutality, to end the war on drugs, to end the kinds of racism we still have, to help everyone have a comfortable life, to protect the rights of people who do abortions, to protect us from theocracy, these are tremendously important issues, far more important than what I do. I just wish I knew how to do something about them.

In fact, a look at Stallman’s homepage, www.stallman.org, shows that he is trying to mobilize public opinion over a wide range of political issues.

Beyond the 'puddle', though, Stallman's ideas do have wider resonance. As music, films, images and texts have become digitized, lifted from their material substrata of plastic or paper, many of the considerations that apply to free software come to bear on them. The issue again is not just about copying but altering. In NLR 13, Sven Lütticken eloquently described the advantages of intellectual 'theft'. Online, the challenges to copyright are considerable, as people swap files using peer-to-peer programs that sidestep centralized surveillance and control. This free exchange of cultural goods is pursued not simply for consumption but to provide material for active alteration—most clearly so in music, where the sampling and mixing of diverse sources is common, but also in video, with 'fan cuts' of TV shows and films. Sometimes such appropriations are undertaken with subversive intent—for instance, in the copying of official websites for satirical purposes, such as those sponsored by the group RTMark, at www.rtmk.com. In the world of online art, attempts to claim exclusive ownership of works or sites have often been met with the practical political act of hacking and illicit copying.

Stallman himself distinguishes between what he calls functional works (software tools, manuals and reference guides, for example), scientific and historical works, and works of art; in his view, all should be freely copied and distributed, but the latter two should only be modifiable if their authors assent. Stallman, whose defence of free software is in essence a moral one, has no doubt that free distribution should apply equally to cultural goods: 'The number of people who find Napster useful . . . tells me that the right to distribute copies not only on a neighbour-to-neighbour basis, but to the public at large, is essential and therefore may not be taken away'.

In a now well-known formulation, Stallman says of free software: 'Don't think free as in free beer; think free as in free speech.' Yet in fact much free software is actually costless, or very nearly so; likewise, swapped files containing music, pictures or video are extremely cheap to download. While to do so is often illegal under current copyright law, it is unclear whether the law could actually be enforced any more successfully in this area than it was over copying music to cassette tapes.

Many of the advantages that work in favour of free software also apply to other goods—particularly, but not solely, those in digital form. The argument about the efficiency that results from rapid peer review is of considerable importance. At www.foresight.org, K. Eric Drexler's pioneering essay on the potential of hypertext points up the fact that conversation on paper develops slowly (certainly in academic circles), due to the time needed for review, resubmission, publication and distribution, and the same is true of any riposte that may be published. What is more, the final result remains unchangeable, and isolated from the comments it has provoked. Hypertext allows for rapid revision, collapses the time-scale involved in getting a response and can link all related texts together.

Free copying, linking and alteration are essential to this process. With cultural works, the right to alter is a free speech issue, as becomes clear when artists are sued for tampering with images of Barbie, using company logos or even invoking company names. Corporations not only want to give their brands and images powerful cultural currency, but also to control their further use. To be unable to play with the image of Mickey Mouse or Ronald McDonald due to the threat of litigation is a fundamental form of cultural censorship. Equally, the copying and alteration of online art works by other artists has been very important to the development of much Net art—theft being seen as a form of flattery.

The ‘copyleft’ issue has major implications for the Left itself. Consider the example of NLR. Its online policy is to make all current political interventions, and a selection of articles from each issue, freely available at www.newleftreview.org, while electronic access to the entire contents of the journal is available only to subscribers. At the same time, the journal is protected by copyright and raises the money that it needs to be published at all from subscriptions, bookshop sales and reprint rights. Under the copyleft agreement, distribution of NLR material would be freely granted to all those who had a desire or need for it. Those who could afford the convenient and attractive packaging of the material that the physical magazine offers would still buy it, but those who needed the material without being able to afford the packaging would not be denied. Furthermore, documents could be annotated, updated, and placed alongside critiques (this can take place with convenience and speed on the Web, but need not be confined to the virtual sphere). As with free software, the ambition would be to foster a widening commons of writing and other cultural material, a sphere in which access is determined primarily by need and not price. In cases like this, would not the gamble offered by copyleft be that widening access, and the goodwill that it creates, increases rather than reduces income?

Until nanobots labour over physical manufactured goods, free beer will not be on offer—though the artist and programmer Joshua Portway has remarked that Christ’s miracle with the loaves and fishes produced the first open-source sandwich. Yet free speech and a free culture—protected by the very mechanisms put in place to restrict ownership and maximize profits—can be. The ‘left’ in copyleft should be taken seriously, as a matter of expediency and principle. In this way, Stallman’s small puddle of freedom may become connected to an ocean.