



© 2003 The Charles Babbage Institute for the History of Information Technology  
211 Andersen Library, 222 – 21<sup>st</sup> Avenue South, Minneapolis, MN 55455 USA

## A Response to “A War on Two Fronts”

Richard Stallman  
Free Software Foundation

Date published: 13 January 2003

**D**ear Editor,

Paul Ceruzzi’s article claims that advancing technology made the Microsoft anti-trust trial irrelevant. Actually it is the details of the settlement that made it irrelevant.

The settlement follows lines I proposed in 1999 (see <http://www.gnu.org/philosophy/microsoft-antitrust.html>), but it has been weakened with loopholes that make it almost null. It requires Microsoft to disclose interfaces to commercial competitors (but not to us!), but allows Microsoft to exclude many of these interfaces (on security grounds), and allows Microsoft to impose a nondisclosure agreement (which releasing any free software would violate). It is also limited to Windows, not including programs such as Word.

If the settlement had required actual *publication* of all the interfaces of Windows and other popular Microsoft software, it could have made a big difference—it would have removed an obstacle that stops the GNU operating system from trying to compete with Microsoft. That would not be irrelevant at all!

The other was the enthusiastic embrace of a rival operating system, Linux, that was available for “free” (in a carefully-defined way, as the paper explains).

The expression “For free” is misleading when used to describe free software. We mean free as in freedom, not gratis; but the expression “for free” specifically means gratis.

That also applies to Linux, which since 1995 has been at the center of a highly-visible movement to provide an alternative operating system to Microsoft’s Windows, and to break out of the Babel of dialects that was threatening Unix after 1990. Linux is the creation of Linus Torvalds, born in 1969 in Finland, where his name is pronounced “Lee-noose.”

## Iterations – Stallman – A Response to “A War on Two Fronts”

The operating system that competes with Microsoft Windows is not Linux, and wasn't started in 1991 or by Linus Torvalds. When we started it, in 1984, we gave it the name “GNU.”

In 1991, the GNU system was not quite finished: it had one major gap. What Linus Torvalds wrote in 1991 is a program that filled the last gap in the system. That program is the real Linux.

The article focuses on the career of Linus Torvalds in a way that would make sense if he were the prime mover of the system's development; this reinforces the widely-held inaccurate picture. If you want to present the history of the GNU/Linux system, you need to start in 1983, with the vision of GNU—the vision of a free society using free software.

In 1991, Linus Torvalds set out to write a version of UNIX for his IBM-compatible personal computer. (p. 37)

This may have been his intention, but in the event the system that came out was mostly the one we had been developing for 8 years already—plus one major component developed by Linus.

The term “version of UNIX” is misleading also, because GNU is not a version of UNIX, and neither is GNU/Linux. (Remember, “GNU's Not Unix.”) UNIX being proprietary, we could not legally use any part of it. GNU is a complete replacement, developed from scratch.

When people refer to the whole system as “Linux,” and of course refer to Linus' program by itself as “Linux,” that ambiguity causes a lot of confusion. This confusion shows itself in the article here:

Brooks argued that large projects need both a “producer” and “technical director”: roles which in Linux development are filled by Alan Cox and Torvalds, respectively. (p. 45)

If you're talking about the real Linux, the kernel, this is accurate. However, Linux can't compete with UNIX or Windows by itself. If you're talking about the system many people call “Linux,” the GNU/Linux operating system, then this statement is not accurate. Alan Cox and Linus Torvalds have never overseen the development of the GNU/Linux system as a whole. (In fact, nobody does that, because versions of GNU/Linux are maintained separately by various companies and organization.) Torvalds and Cox oversee work on Linux, the kernel.

Whether the development of Linux is a vindication or refutation of Brooks's Law is of central importance to the Linux community.

If you mean the community of users of GNU/Linux, I don't think this issue is particularly important to our community. The debate about Brooks's Law is

important to some people in the open source movement because they claim that the whole point is developing more powerful and reliable software. We in the free software movement value freedom and community most of all, so we are not very concerned with Brooks’s Law. What is important about GNU/Linux is that it (1) works and (2) respects our freedom.

Some advocates of the GPL philosophy coined the term “open source,” mainly to distance themselves from him personally. Their commitment to the GNU [General] Public License however is as strong as anyone’s.

This is half true. Some wanted to distance themselves from me personally, but that was just part of the reason. They wanted to distance themselves from the ethical stance of the free software movement, which says that users are morally entitled to the freedom to share and change software. The open source movement never says that non-free software is ethically wrong, only that they do not prefer it. They set out to make the philosophy corporate-friendly, and figured that the way to do that is to avoid criticizing usual business practice as wrong.

They may be right that this is the way to be corporate-friendly. Corporations in the U.S. prefer to use their term, not ours, which is the main reason it became widely used. (The articles about “open source” generally do not hesitate to label us and our work with that term, so that many people believe we are part of the open source movement. That’s like calling Nader a Republican.)

However, the historical fact is that the free software movement’s idealism is the main reason why GNU/Linux exists. People with open source views today develop important free software and have contributed substantially to our community, but since they do not regard non-free software as unethical and intolerable, they would never have taken it upon themselves to work persistently just to free themselves from it. We idealists did that work.

But once modified, their creators could and did sell them for a profit. One cannot do that with Linux, with GNU tools, or with other software under the GPL.

The GNU GPL allows selling copies for a profit. See <http://www.gnu.org/philosophy/selling.html>.

The term “GNU tools” here will tend to give readers the wrong idea. GNU is not a collection of tools. GNU is an operating system. Many GNU packages are tools, and many other GNU packages are not tools. It happens that some of the tools are widely known, and people think the system is “Linux”; this often leads to the idea that GNU is a collection of tools.

Many popular accounts of the history of Linux emphasize the rift between Linus Torvalds and Richard Stallman, who are only a few years apart in age but represent different generations in many ways. Such accounts neglect the fact that Torvalds completed what Stallman set out to do, and Linux is protected by the GPL. Stallman ran

## Iterations – Stallman – A Response to “A War on Two Fronts”

into difficulties in developing a UNIX kernel, which was the first thing that Torvalds wrote.

The GNU Project ran into difficulties developing the GNU Hurd, and as the leader of the project, I am responsible for the design decisions that led to them. But I personally never worked on the GNU Hurd.

Among Linux evangelists are a strong and vocal group who tout Linux-based programs that offer a graphical interface like Windows (“KDE” and “GNOME”).

GNOME is the GNU desktop. This is a large GNU package that is not a tool. It is not a Linux-based program, though; it has nothing particularly to do with Linux, the kernel.

Linux is still accessed by typing at a command line, like DOS of old.

This is misleading, because it is not the case that GNU/Linux is always accessed that way. The GNU/Linux system can be accessed that way or through GNOME.

In any event, what started out as a footnote to the Microsoft antitrust trial, something that Linus Torvalds claimed was “just a hobby, [and] won’t be big and professional” is turning out to be quite interesting. We shall see. (end of p. 21)

Developing the kernel was just a hobby for Linus, but the GNU system as a whole was not just a hobby. We developed it for an explicit mission of social change, and if not for this mission, nothing like it would exist today.

It is very important for the public to know this. If we succeed in regaining freedom for computer users, it won’t be by coincidence, it will be because we valued freedom and were willing to work hard to get there. See <http://www.gnu.org/philosophy/gpl-american-way.html>.

Sincerely,

Richard Stallman  
Chief GNUisance  
President, Free Software Foundation

Richard Stallman, “A Response to ‘A War on Two Fronts,’” *Iterations: An Interdisciplinary Journal of Software History* 2 (January 13, 2003): 1-4.