Chapter 1.2
Free Software Philosophy and Open Source

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ABSTRACT

This chapter introduces and explains some of the most relevant features of the free software philosophy formulated by Richard M. Stallman in the 1980s. The free software philosophy and the free software movement built on it historically preceded the open source movement by a decade and provided some of the key technological, legal and ideological foundations of the open source movement. Thus, in order to study the ideology of open source and its differences with regard to other modes of software production, it is important to understand the reasoning and the presuppositions included in Stallman's free software philosophy.

INTRODUCTION

The free software (FS) movement is the key predecessor of the open source (OS) community. The FS movement, in turn, is based on arguments developed by Richard M. Stallman. In crucial ways, Stallman's social philosophy creates the background for the co-operation, co-existence and differences between the two communities. Stallman started the FS movement and the GNU project prompted by his experiences of the early hacker culture and subsequent events at the MIT artificial intelligence lab in the 1980s. The project was founded on a philosophy of software freedom, and the related views on copyright or the concept of *copyleft*. After the creation of the open source movement in 1998, debates between the two movements have erupted at regular intervals. These

debates are grounded in the different ideological perspectives and sociopsychological motivations of the movements. The FS movement has laid technological, legal and ideological cornerstones that still exist as part of the open source movement.

THE SOCIOHISTORICAL BACKGROUND OF THE FREE SOFTWARE PHILOSOPHY

The first computer systems were built in the 1940s and 1950s mainly for military and scientific purposes. One of the earliest research institutes to use and study computers was the Massachusetts Institute of Technology (MIT). The artificial intelligence (AI) lab at MIT was founded in 1958 and became one of the birthplaces of computer science and computer culture.

In *Hackers* (1984), Steven Levy describes the subculture around the AI lab computers in the 1960s. Young male electronics hobbyists devoted their time to programming and studying these machines. They called themselves *hackers*, a word denoting a person who enjoys exploring computer systems, being in control of the systems, and facing the challenges they present. For a hacker, a computer is not just a tool, it is also an end in itself. The computer is something to be respected and programming has an aesthetics of its own (Hafner & Lyon, 1996; Levy, 1984; Turkle, 1982).

A subculture was created among the MIT hackers with traditions and social norms of its own. Important values for the community were freedom, intelligence, technical skills, and interest in the possibilities of computers while bureaucracy, secrecy, and lack of mathematical skills were looked down on. The six rules of this *hacker ethic* as later codified by Levy were:

1. *Access to computers—and anything which might teach you something about the way the world works—should be unlimited and total. Always yield to the hands-on imperative!*
2. *All information should be free.*
3. *Mistrust authority—promote decentralization.*
4. *Hackers should be judged by their hacking, not bogus criteria such as degrees, age, race, or position.*
5. *You can create art and beauty on a computer.*
6. *Computers can change your life for the better.* (Levy, 1984, pp. 40-45)[1]

Computer programs were treated like any information created by the scientific community: Software was free for everyone to use, study, and enhance. Building on programs created by other programmers was not only allowed, but encouraged. On one hand, nobody owned the programs, and on the other, they were common property of the community.

In the early 1980s, a conflict arose in the AI lab when some of the hackers formed a company called Symbolics to sell computers based on technology originally developed in the lab. Symbolics hired most of the hackers, leaving the lab empty. This, together with the fact that the software on Symbolics machines was considered a trade secret, caused a crisis. The community and its way of life had been destroyed and Stallman later described himself as "the last survivor of a dead culture" (Levy, 1984, p. 427; see also Williams, 2002).

Stallman saw an ethical problem in the growing trend of treating software in terms of property. In the AI lab, there was a strong spirit of co-operation and sharing, making the code, in a way, a medium for social interaction. Thus restrictions in the access to code were also limitations on how people could help each other.

In 1984, Stallman published *The GNU Manifesto* announcing his intention to develop a freely available implementation of the Unix operating system. He explained his reasons in a section titled *Why I Must Write GNU*: