# Free Software and Open Source: A Grass Roots Movement Under the Capitalist System?

# Ayşe Şat<sup>1</sup> & Hakan Karahasan<sup>2</sup>

<sup>1</sup>Girne American University, Department of ELT, Mersin 10, Turkey <sup>2</sup>Girne American University, Department of Communication, Mersin 10, Turkey

Ignorance is the curse of God.
Knowledge is the wing wherewith we fly to heaven.
William Shakespeare
Cees J. Hamelink - The Ethics in Cyberspace

#### Abstract

This paper focuses on the similarities between capitalism, Free Software and Open Source, which are based on the logic of freedom. However, both Free Software and Open Source have limitations within the social order because they are part of the capitalist system. Is it possible to state that Free Software and Open Source have become a substitution of proprietary software? Do they just use the word "free" without actually meaning it? Considering these, this paper is an attempt to analyse Free Software and Open Source within the context of capitalism. Can we regard Free Software and Open Source in terms of grass-roots movement? Or, they are just a different voice within the capitalist system? Like rock music, are Free Software and Open Source also entering the mainstream as well? In brief, this paper scrutinises Free Software and Open Source software within the context of capitalism and examines whether they are only a different version of the capitalist system.

#### Introduction

Knowledge is an essential human resource. For its development and application proper balance should be established between the ownership interests of knowledge-producers and the public good interests of knowledge-users. It is very doubtful whether the emerging global governance of intellectual property right could provide such a balanced approach (Hamelink 2000).

The issue that Hamelink (2000) points out is not a new phenomenon. Although the roots of this phenomenon go back a long way, it has a new dimension with the new communication technologies, such as the development of the computer industry and the Internet.

Free and open software development take a significant place in this global age. They are working together to establish free software for everyone that can be used for different purposes. Although "Free Software" and "Open Source" can be seen within the same spectrum, they also have major differences. For example, according to "Free Software", free software gives freedom to people. However, "Open Source" works with corporations and tries to sell their products.

The main idea behind the open source is, "you can look at the source code". Though, as it is indicated in the definition of Free Software: "Free Software is a matter of liberty, not price. To understand the concept, you should think of 'free' as in 'free speech', not as 'free beer'". In other words, both of them work for the benefit of society. However, Open Source allows one to see the codes and improve them and "they might be able to 'sell' the software more effectively to certain users, especially business". Therefore, one can say that it gives one limited freedom to use or to see the codes, but at the same time it is working with the companies to earn money. Another feature of Free Software is, "A free program must be available for commercial use, commercial development, and commercial distribution. Commercial development of free software is no longer unusual; such free commercial is very important". This means that as with the Open Source Software, both of them selling their products, and in this way they are trying to gain money under the name of "free"?

One of the characteristics of capitalism is that it allows one to create new things or give a new shape to the social structure and these kinds of changes can be accepted by the regime. In addition, one can challenge it according to its rules or the reality that the system imposes over people. For example, Free Software and Open Source are free and it seems that they are working for the benefit of community. However, one also can find some examples that both of them are used for commercial purposes. Both Free Software and Open Source sell their products in order to exist. GNU/Linux operating systems are good examples of this, such as Red Hat, Mandrake, Yellow Dog etc. What these examples show is that neither Free Software nor Open Source are offering 'a new way of looking' but 'a new option' within the capitalist system.

In brief, this paper focuses on the relationship between capitalism, Free Software and Open Source, which are based on the logic of freedom. However, they have limits inside of the social order because they are part of the capitalist system and they become just a different choice within the system. Considering these, this essay is an attempt to analyse Free Software and Open Source within the context of capitalism. Can we regard Free Software and Open Source in terms of grass-roots

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<sup>&</sup>lt;sup>1</sup> However, we are also aware of the fact that most of the GNU/Linux operating systems are free to distribute gratis. Nevertheless, this does not change one fact: they are not offering a new way if they are not against the system on a fundamental level.

movement? Or, are they just a different voice within capitalist system? In other words, do Free Software and Open Source offer completely 'a new way of looking', an alternative view, or they are just a substitution of something else (i.e., proprietary software)? In the same way as rock music entered the mainstream, Free Software and Open Source are also entering the mainstream? On the whole, are Free Software and Open Source only a substitution within the capitalist system and they try to be more powerful by using the net and playing with the words? These are some of the questions that the paper will address.

# Free Software and Open Source: What Are They?

The roots of Free Software go back to 1984. Free Software was born when Richard Stallman, who has worked at the MIT Artificial Intelligence Lab, faced a problem about software sharing.

As he asserts in "The GNU Project",

When I started working at the MIT Artificial Intelligence Lab in 1971, I became part of a software-sharing community that had existed for many years. Sharing of software was not limited to our particular community; it is as old as computers, just as sharing of recipes is as old as cooking. But we did more than most... If you saw someone using an unfamiliar and interesting program, you could always ask to see the source code, so that you could read it, change it, or cannibalize parts of it to make a new program.

In the same essay, he says that 'the first software-sharing community' radically shifted to proprietary software by hiring nearly all the hackers at the MIT AI Lab. With this change, Stallman decided not to join the proprietary software world. Instead, he wanted to maintain the idea of 'sharing software with thy neighbour' and he started to work on an operating system based on Unix. For him, the reason why he chose to create an operating system based on Unix was because, as Stallman puts it: "I chose to make the system compatible with Unix so that it would be portable, and so that Unix users could easily switch to it".

The main idea behind creating a new operating system was, according to Stallman, derived from the idea that "With a free operating system, we could again have a community of cooperating hackers —and invite anyone to join. And anyone would be able to use a computer without starting out by conspiring to deprive his or her friends".

With this in mind, Stallman argues that a programme is a free software if,

- You have the freedom to run the program, for any purpose.
- You have the freedom to modify the program to suit your needs. (To make this freedom effective in practice, you must have access to the source code, since

making changes in a program without having the source code is exceedingly difficult.)

- You have the freedom to redistribute copies, either gratis or for a fee.
- You have the freedom to distribute modified versions of the program, so that the community can benefit from your improvements.

On the other hand, Open Source Initiative was established in 1997. Simply, "Open source doesn't just mean access to the source code". Nevertheless, according to Open Source Initiative, software must be freely redistributed, allowing one to see and modify the source code, but "may restrict [the] source-code from being distributed in modified form only if the license allows the distribution of "patch files" with the source code for the purpose of modifying the program at build time". Also, there should be no discrimination against anyone or any group as well as no discrimination against 'fields of endeavor'. "License must not be specific to a product, License must not restrict other software", and "License must be technology-neutral".<sup>2</sup>

Although both Free Software and Open Source appear to be the same thing, they are not the same althoug in terms of aims and so on they have many things in common. The main controversy between Free Software and Open Source lies, as Stallman quoted one person, in "Why "Free Software" is better than "Open Source"", "Open source is a development methodology; free software is a social movement". For Stallman "For the Open Source movement, non-free software is a suboptimal solution. For the Free Software movement, non-free software is a social problem and free software is the solution" (emphasis added).

For Open Source, the significant thing is, in order to be open source software it must follow the criteria that set out by Bruce Perens. One of the main differences between Free Software and Open Source is what Stallman describes as "For the Free Software movement, non-free software is a social problem and free software is the solution" (emphasis added). As the ninth criterion of Open Source suggests, "License must not restrict other software". In other words, as "The Open Source Definition" points out, "The license must not place restrictions on other software that is distributed along with the licensed software. For example, the license must not insist that all other programs distributed on the same medium must be open-source software". Open Source software does not argue that the license of a distributed software must be open source software, whereas for Free Software all software must be free.

<sup>&</sup>lt;sup>2</sup>Taken from http://www.opensource.org/docs/definition/php (emphasis added - document last accessed on 4/10/2004).

## Free Software and Open Source: Toward a Grass-Roots Movement?

Considering these points, is it possible to consider Free Software and Open Source as a grass-roots movement? Although both Free Software and Open Source have the potential, it is not so easy to say that especially Open Source carries that kind of objection. As the definition of Open Source suggests, Open Source did not come up with the idea of sharing software for free, whereas in the webpage of the Free Software Foundation (FSF) GNU Operating System is defined as "Free as in Freedom". However, the concept of freedom that Free Software and Open Source are talking about does not mean free for all. The reason is that, as Ralph L. Holsinger and John Paul Dilts (1994) indicate, Plato's ideas in Media Law that freedom is limited inside of the control mechanism: "We do know that the idea was brought to life for the first time in the fifth century B.C., when the city-state of Athens experimented with a form of democracy. From that experience emerged the companion idea that people should be free to talk about the policies of government and decide for themselves which are good and which are bad... Plato among them, and at the age of 31 found that even in a democracy, there are limits of freedom of speech" (Holsinger and Dilts 1994, p. 20) These lines show that in the past people were not free to criticise the power structure, but in the fifth century B.C, people started to express their own ideas about government. However, for Plato we still have some problems or limitations in democracy. We can say that Plato's ideas are still applicable because we are limited in the 'new democratic age' and because of this the idea of freedom still does not totally work in this age and we still have limitations.

As Stallman puts it, "For the Free Software movement, non-free software is a social problem and free software is the only solution". In terms of "grass-roots", according to the American Heritage Dictionary: "(A) People or society at a local level rather than at the center of major political activity. Often used with the. (B) The groundwork or source of something." Thus, one can say that Free Software has a broader philosophical dimension than Open Source but one also can argue that in terms of practical solutions (or recommendations in Stallman's term) Open Source is quite significant.

Nonetheless, in "The Subject and Power", Michel Foucault (1983) discusses the subject and its power in terms of power relations. He gives examples from some 'anti-authority struggles'. Such as, "opposition to the power of men over women, of parents over children, of psychiatry over the mentally ill, of medicine over the population, of administration over the ways people to live" (Foucault 1983, p. 419). He outlines what are the common things about these 'anti-authority struggles' (Foucault 1983) and one can think that one can apply them to the Free Software and Open Source movements. For Foucault, the similar points of the 'most of the anti-authority struggles in the  $20^{th}$  century' are,

- 1. They are "transversal" struggles; that is, they are not limited to one country.
- 2. The aim of these struggles is the power effects as such. For example, the medical profession is not criticized primarily because it is a profit-making concern but because it exercises an uncontrolled power over people's bodies, their health, and their life and death.
- 3. These are "immediate" struggles for two reasons. In such struggles people criticize instances of power which are the closest to them, those which exercise their action on individuals.
- 4. They are struggles which question the status of the individual: on the one hand, they assert the right to be different, and they underline everything which makes individuals truly individual. On the other hand, they attack everything which separates [the] individual, breaks his links with others, splits community life, forces [the] individual back on himself, and ties him to his own identity in a constraining way...
- 5. They are [in] opposition to the effects of power which are linked with knowledge, competence, and qualification: struggles against the privileges of knowledge. But they are also an opposition against secrecy, deformation, and mystifying representations imposed on people...
- 6. Finally, all these present struggles revolve around the question: Who are we? They are a refusal of these abstractions, of economic and ideological state violence, which ignore who we are individually, and also a refusal of a scientific or administrative inquisition which determines who one is.

To sum up, the main objective of these struggles is to attack not so much "such or such" an institution of power, or group, or elite, or class but rather a technique, a form of power (Foucault 1983, pp. 419-420).

Is it possible to consider these movements in terms of 'a form of power'? In other words, how Free Software and Open Source attack 'such or such' an institution of power'? (Foucault 1983). Or, should these movements be seen within capitalism because capitalism, by its nature, allows these kinds of movements?

## The Relationship between Capitalism, and Free Software and Open Source

The power system controls most of the social mechanism to impose its rules over people and control the social structure. In his article "Ideological State Apparatuses", Louis Althusser (1971) claims,

With all the reservations implied by this requirement, we can for the moment regard the following in situations as Ideological State Apparatuses (the order in which I have listed them has no particular significance):

- the religious ISA (the system of the different Churches),
- the educational ISA (the system of the different public and private 'School"),

- the family ISA,
- the legal ISA,
- different parties,
- the trade-union ISA,
- the communication ISA (press, radio and television, etc.),
- the cultural ISA (Literature, the Arts, sports, etc.) (p. 143).

According to him media, school, church, government and press are some of the gates or tools that the capitalist system controls in order to spread its ideology over human beings. In other words, they are the part of the capitalist system. As can be seen from the list, legal, trade-union, and communication ISAs are related to the subject of Free Software and Open Source. As can be read in "Some Confusing or Loaded Words and Phrases that are Worth Avoiding" the government has power to control Free Software and Open Source even as they have rules to control human beings within the capitalist system as indicated before. As Richard Stallman claims,

... certain kinds of rules about the manner of distributing free software are acceptable, when they don't conflict with the central freedoms. For example, copyleft (very simply stated) is the rule that when redistributing the program, you cannot add restrictions to deny other people the central freedoms. This rule does not conflict with the central freedoms; rather it protects them. Thus, you may have paid money to get copies of free software, or you may have obtained copies at no charge. But regardless of how you got your copies, you always have the freedom to copy and change the software, even to sell copies. Sometimes government export control regulations and trade sanctions can constrain your freedom to distribute copies of programs internationally. Software developers do not have the power to eliminate or override these restrictions, but what they can and must do is refuse to impose them as conditions of use of the program. In this way, the restrictions will not affect activities and people outside the jurisdictions of these governments (emphasis in the original).

In addition, these lines show that even in Free Software there are rules to control the social structure. It has its own rules to control their working mechanism or their own ideology. In other words, it is a kind of small capitalist system with different ideological truths.

Nonetheless, David Tetzlaff defines capitalism as: "The project of capitalism is a very material one. It aims to accumulate the maximum amount of profit" (Tetzlaff 1992, p. 68). Taking this definition for granted, one can ask how the definition of capitalism and the Free Software and Open Source are related. The main point might be, although both Free Software and Open Source movements seem a little

bit opposed to the system that we live in (i.e., the capitalist world), what we argue in this paper is the fact that these struggles are against the system but the boundaries of these movements have been shaped before. So, these movements can be seen as opposing, which they are, but the pawn can play only on the chessboard; and in order to play chess, one should follow the rules...

Nevertheless, what both Free Software and Open Source suggest is the choice within the boundaries that we live in. As Brian Massumi (1992) says about democracy: "every body's "free choice" to delegate its becoming in return for living out its "productive life" in the despotism it most desires. Choose you quasicause. "Democracy" is the quasicause representing the choice of quasicauses: equal opportunity despotism" (p. 125). However, it is not possible to argue that Massumi's (1992) argument about democracy can be applicable to Free Software and Open Source. Instead, these attempts can be seen as a way of challenging the system; however, the question is, as always, is it possible? And if so, how?

One can give an example of how 'an anti-struggle' became mainstream by citing rock music. With the 1970s rock music and 68 movements began as a challenge to the system. However, what one can see now is the fact that with the institutionalisation of rock music, it become mainstream.

One of the features of capitalism, according to David Tetzlaff (1992) is:

Capitalism can easily suffer those struggles that fail to address the social relations of profit accumulation. It is even in its interest to encourage them. They draw attention and energy way from the prevailing economic structure and its effects. In allowing these struggles, capital also gives its subjects as sort of reward or bride in the form of limited autonomy (p. 63).

As Tetzlaff (1992) argues, Free Software and Open Source are also considered as problems to the system. Microsoft's panic about Open Source and the uncovering of the Halloween Documents can be a good example of that.<sup>3</sup> However, one should also bear in mind that Free Software and Open Source are not threatening the system. IBM and Sun Microsystems support for Open Source indicate that especially Open Source is not a 'threat' to the system. According to Tetzlaff (1992)

When cultural struggle does produce popular discourses that might challenge capital's position, capital becomes alerted to its weaknesses and is able to identify the next target for incorporation (although the motivating force behind incorporation is generally an attempt to exploit markets for new cultural products, rather than any Machiavellian political intent). Over the long term, many of our struggles may merely be part of the ritual of domination. They give us a chance to play in the great sport of self-

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<sup>&</sup>lt;sup>3</sup> For more information about the Halloween Documents, see http://www.opensource.org/halloween.

determination, and so we keep showing up for the games, even though its all fixed and we lose every time (p. 63).

The situation of rock music and the Green movement are good examples about Tetzlaff's (1992) argument. The same may be true for Free Software and Open Source. Red Hat is a good example of how the GNU/Linux operating system became a 'new industry'. As the essay "Is Red Hat becoming Linux's Microsoft?" indicates,

Red Hat – a company that also plans to generate revenue from selling Linux support services – did not appreciate the humor inherent in its trademark being emblazoned on a risqué poster advertising the services of a direct competitor. So the Red Hat summoned its lawyers. The posters had to come down.

Although neither Free Software nor Open Source are against selling software, however, the position that we are standing now should be understood in terms of a slightly modified Foucaultian view, which is, especially Open Source, are not against the system but "rather a technique, a form of power" (Foucault 1983, p. 420). In other words, they just want to be a substitution instead of proprietary software. The position of Free Software is a little bit different because, in the writings of Richard Stallman, he claims that same as in the past, when software could be distributed freely, software should be free as the right of freedom. Also, as the Universal Declaration of Human Rights, Article 19 indicates: "Everyone has the right to freedom of opinion and expression; this right includes the freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers." These lines totally indicate a freedom for the capitalist system. The reason is that through the media one can express one's ideas but this in not true. The reason is that capitalist system uses the media and other tools to control the social structure.

Thus, one can say that the aim of this new software programmes create a kind of competition as Karl Marx and Frederick Engels point out in the Manifesto of the Communist Party (1953). Karl Marx and Frederick Engels talk about competition: "Freeman and slave, patrician and plebian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary reconstitution of society at large, or in the common ruin of the contending classes" (p. 46). It means that new ideas are inside of the system and they work according to the rules of the system same as the Microsoft and Free/Open Source Software.

### Conclusion

In conclusion, this paper questions the phenomenon of Free Software and Open Source in terms of grass-roots movement. Throughout the paper, one would find

that the purpose of this study is to reveal the fact that although these two movements are opposed to the capitalist system, they do not 'threaten' the system but, unfortunately, serve to benefit it. David Tetzlaff's (1992) "Popular Culture and Social Control in Late Capitalism" shows how capitalism allows one to challenge but in the end it is capitalism that that wins the game.

The other thing is that we analysed these phenomenon within a Foucauldian framework, which is, like most of the movements in the 20<sup>th</sup> century, Free Software and Open Source movements are also movements that are not criticised the system but a form. However, one also should bear in mind that, in terms of criticising the system, there is a difference between Free Software and Open Source: Free Software does not accept any kind of co-operation with proprietary software; however, for Open Source this is not a problem.

Nonetheless, this does not mean that we are against the Free Software and the Open Source movement. Instead, we believe that, for the benefit of society, more people should read and understand the principles of Free Software and Open Source. By doing this, as Richard Stallman argues, one day software will be free...

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