A STUDY OF FREE SOFTWARE MOVEMENT: TOWARDS A NEW SOCIETY?

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ABSTRACT

A STUDY OF FREE SOFTWARE MOVEMENT: TOWARDS A NEW SOCIETY?

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Information and communication technologies and their innovative apparatuses have extensive social consequences. The basic interest of this thesis is to argue whether the information technologies and their technological apparatuses have the power to breach in the current capitalist system and therefore to lead us into a transformation towards an alternative world. In fact, this study more specifically attempts to argue and make sense out of this argument on the basis of an analysis of the Free Software Movement (FSM), since it is a product of the information technologies and has some suggestions for such a transformation towards a new society. Simultaneously, the study also argues the novel parts of the FSM as a new social movement and change agent of today's contemporary world with reference to the literature on social movements.

Keywords: Free Software, New Economy, Digital Economy, Gift Economy, Intellectual Property, Social Movements, New Social Movements, Copyright.

ÖZ

ÖZGÜR YAZILIM HAREKETİ ÜZERİNE BİR ÇALIŞMA: YENİ BİR TOPLUMA DOĞRU MU?

Peştimalcıoğlu, Güzin

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Bilgi ve iletişim teknolojileri ile yenilikçi araçları geniş sosyal sonuçlara sahiptir. Bu tezin temel ilgi alanı, bilgi teknolojilerinin ve onların teknolojik aygıtlarının, mevcut kapitalist sistemde bir gedik açacak ve bizi alternatif bir dünyaya doğru dönüşüme götürecek bir güce sahip olup olmadığını tartışmaktır. Daha doğrusu, bu çalışma, bilgi teknolojilerinin bir ürünü olduğundan ve yeni bir topluma geçiş için bazı önerilere sahip olduğundan, söz konusu tartışmayı Özgür Yazılım Hareketi'nin analizi üzerinden yapmaya çalışır. Aynı zamanda, çalışma, sosyal hareketler hakkındaki literatüre referansla, yeni bir sosyal hareket ve değişim habercisi olarak Özgür Yazılım Hareketinde yeni olan kısımları tartışır.

Anahtar Kelimeler: Özgür Yazılım, Yeni Ekonomi, Dijital Ekonomi, Armağan Ekonomisi, Entellektüel Mülkiyet, Sosyal Hareketler, Yeni Sosyal Hareketler, Telif Hakkı.

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Date: Signature:

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LIST OF ABBREVIATIONS

AFAIC : As Far As I'm Concerned

AFAIK : As Far As I Know

BCG   : The Boston Consulting Group

BTW   : By The Way

F/OS   : Free or Open Source

FS   : Free Software

FSF   : Free Software Foundation

FSFE   Free Software Foundation Europe

FSM   : Free Software Movement

GNU   : GNU's Not Unix!

GPL   : General Public License

ICT   : Information & Communication Technology

IIRC   : If I Recall Correctly

IMHO   : In My Humble Opinion

IMO   : In My Opinion

IPR   : Intellectual Property Right

IT   : Information Technology

NSMs   : New Social Movements

OS   : Open Source

OSDN   : Open Source Developer Network

RM   : Resource Mobilization

T.A.Z. : Temporary Autonomous Zone

CHAPTER 1

INTRODUCTION

The basic interest of this thesis is to argue whether the information technologies and their technological apparatuses have the power to breach in the current capitalist system and therefore to lead us into a transformation towards an alternative world. In fact, this study more specifically attempts to argue and make sense out of this argument on the basis of an analysis of the Free Software Movement (FSM), since it is a product of the information technologies and has some suggestions for such a transformation towards a new society. Simultaneously, the study also argues the novel parts of the FSM as a new social movement and change agent of today's contemporary world with reference to the literature on social movements.

It is unanimously agreed that the state of the world has changed. Although it is still controversial to decide whether the present epoch is a continuation of the industrial age or is a postindustrial age, it is obvious that the emphasis on information has extremely increased. The terms used to describe this so-called 'new' epoch, such as 'information age' or 'information society', indeed refer to another state directed by communication technologies, microelectronics, robotics, genetic technologies, etc., which are based on digitally-encoded information. By means of the advances in these new technologies, information is easily collected, stored, processed and shared without considering time and space. This means that an enormous potential, which may cause big economical and social changes, is set free. Here, the critical question that may be asked is whether these new information and communication technologies can really solve economical and social problems of today's world. Since people are witnessing both positive and negative effects of these new technologies simultaneously, finding an answer to this question is becoming difficult. On the one hand, today's new information and communication

technologies are facilitating the ways of reaching more people even if they are geographically far from each other. On the other hand, regulations by a diffuse social control to restrict reaching and using information also increase and go beyond the public sphere (Melucci, 1994). Since information is commodity exploited economically, it is unevenly distributed in society. Therefore, the increasing amount of restrictions to use information as commodity makes the gap between developed countries and developing or undeveloped countries much greater.

Indeed, the advances in new information and communication technologies have critical impacts on both economical and social structures of the existing societies. These impacts have also started to cause fundamental changes on social movements in terms of their actors, movement themes, forms and areas of struggle. As Melucci (1994) states, the conflicts are emerging from the areas of the system mostly related with the production of information. For him, their concern is actually 'the production and the appropriation of resources that are crucial for a global society based on information' (Melucci, 1994:102). Actually, it is an indisputable fact that the information-based orientations and applications of today's technologies have caused the widespread use of computer technology, which has started to be used as an apparatus of political struggle and brought about changes in the forms of social conflicts. Furthermore, the computer technology has made social movements possible to collaborate and communicate beyond the borders of the nations and to organize at a global level. For example, as Cleaver (1999) argues, Zapatistas use the modern computer technology and its aspects to disseminate their messages despite governmental control, to share their experiences and to facilitate the discussions for their organization and political struggles. In other words, modern computer communications have made global participation possible for the Zapatista Movement by providing it more freedom to move out of governmental censorship. Cleaver (1999) gives the South Korean labor movement as another example for the use of the Internet to reach out to the rest of the world and to achieve considerable support for their struggle in a similar manner to the Zapatistas in Mexico. Actually, he claims that "...the most serious challenge to the basic institutional structures of modern society flow from the emergence of computer-linked global social

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movements that are, increasingly, challenging both nationa and supranational policy-making institutions" (Cleaver, 1999:1). On the contrary, Hakim Bey does not seem so much optimistic. In contrast to Cleaver's hopeful point of view, he feels uncertain about the computer technology and its outcomes. In the preface for the Turkish printing of his book, Temporary Autonomous Zone (T.A.Z), he evaluates the Net as a kind of social inter-explosion or catastrophe (Bey, 2002). According to him, the anarchists were attracted by the Net, because it was seeming indefinite. Whereas, the pressure might increase such a limitless space.

Although the unlimited nature of the Net is a debatable issue, it might be commonly claimed that the Internet is favored space of today's global social movements to organize. Among those internetworked social movements, the FSM is quite remarkable with its 20 year-old history. It might be claimed that the FSM is an interesting social phenomenon of the current epoch. Actually, it has a novel aspect among the different orientations of collective actions with reference to its conflictual attitude towards the existing system and its attempt to give another name to the world. The FSM as an empirical object constitutes a unique history like the history of the other movements. Within this unitary existence, this study will also attempt to understand the multiplicity of the elements of the FSM.

Briefly, this study is designed specifically to understand the FSM with respect to the literature on information capitalism and social movements. It is obvious that information and communication technologies and their innovative apparatuses have extensive social consequences. However, those consequences bring about some critical questions, which are also the concern of this thesis about the state of the world in future or in shaping future's society. The fact is that the FSM is more than the grievances about the freedom for a piece of computer code. The present history of the movement shows us that it is difficult to ignore the increasing number of Free Software advocates and global power of the movement. So, it will be important to understand 1) What are their critiques for the current state of the capitalism? And 2) What are their proposals for a new social order?

This thesis is composed of five chapters. The first chapter is a brief introduction to the subject. It also presents the method of analysis, including the assumptions and the hypothesis of the study and the research sample to explain how the study is handled.

The second chapter constructs the theoretical framework of the study. It firstly attempts to argue the information capitalism, since the FSM is largely related to it. In order to do that, both the information economy and the changes in the concepts and practices of "work" are tried to be discussed by underlying the present state of the world. Since, within the FSM discussions it is claimed that the principles of the production of Free Software might be a guide towards a new society, this chapter also attempts to argue the idea of a new society in information capitalism. Then, this chapter briefly tries to draw a theoretical framework for social movements as a powerful component of the social change. This part attempts to clarify what is understood by the new social movements in order to understand the basic characteristics of the FSM later. Lastly, this chapter elaborates the fundamental perspectives constructed to explain and deal with New Social Movements (NSMs). Rather than presenting all dimensions of these perspectives, it particularly focuses on the considerable parts of them, which will soon help to understand the FSM.

The third chapter is devoted to the detailed description of the FSM. Firstly, it explains the dynamics for the emergence of the FSM in a historical context and then continue to explore the main themes and concepts of the movement by referencing the literature review made on the FSM. Finally, the Oekonux Project, which is a project for the discussions about Free Software and its possible social implications including the possibility of a new society, is introduced.

In the forth chapter, the messages sent to the Oekonux mailing list, list-en@oekonux.org, are analyzed. This chapter specifically attempts to analyze the FSM by assuming it as a form of the NSMs. It quotes texts related with the concepts of capitalism, which are discussed in the mailing list and argues them with reference to the theoretical framework of the study. Then, it attempts to put the discussions of

the list participants for a new form of society and draws an attention for a possibility of constructing a new social order through the principles of the production of Free Software. Finally, the last chapter evaluates the FSM and concludes the subject.

1.1. Method of Analysis

The basic concern of this study is to understand the conflicts of the FSM with the capitalism by assuming its newness within the context of the NSMs. So, I assumed that

1. the FSM is a form of the NSMs.

The study includes an empirical research on the Oekonux Project. Actually, I constructed my empirical study on the mailing list initiated within the Oekonux Project, because it seemed to me appropriate to analyze the orientations of the activists of the FSM. In order to analyze the messages sent to the list, I also assumed that

2. the subjects discussed in the mailing list list-en@oekonux.org could only be analyzed through a qualitative research.

Since newness is by definition a relative concept, it is a useless attempt to argue and try to decide whether the FSM is really new or not. Therefore, deciding whether the FSM is equivalent or comparable to historical forms of class conflict and previous phenomena of history is not a question of this study. On the contrary, the theoretical problem of this study is, in what points the FSM has conflicts with the constitutive logic of the information capitalism or whether its antagonisms are interior to the movement itself. In fact, the remarkable attempt of this study is to examine the multiplicity of the FSM as a global contemporary phenomenon, and to analytically evaluate the basic orientation of it. So, my hypothesis is:

The FSM, as a form of new social movement, has antagonistic conflicts with the current information capitalism and constitutes a breach of the system's

compatibility limits. Actually, the conflictual attitude of the FSM and the breach that it created in the system's limits have a potential to renew the existing conditions of present social order.

This study includes the qualitative discourse analysis of the mailing list, list-en@oekonux.org, which was initiated within the context of Oekonux Project. "A discourse refers to the sum total of the 'manifestos, records of debates at meetings, actions of political demonstrators, newspaper articles, slogans, speeches, posters, satirical prints, statutes of associations, pamphlets, an so on' of a time, a place and a people"[1] (Johnston, 2002:67). So, the main purpose of my empirical study is to make a descriptive research, utilizing textual analysis over the list messages. Actually, the analysis presents themes or concepts discussed by the list participants and activists and how they approach social issues from the perspective of Free Software. The unit of analysis is each message sent to the list. Message clearly means that each reply even if discussing the same subject, is accepted as a unit of analysis. My research sample includes messages sent to the list from 13 September 2000, the date of the first message sent to the list, to 20 January 2003, the date I have chosen as the end of the time period[2]. I downloaded all messages between these two dates from the web page of the project[3]. Since all messages were archived perfectly in the web page of the project, I easily collected my research data. In order to grasp the critical points of the project and therefore the FSM, I started my analysis from the first message sent to the list. I analyzed each list message in macro level. In other words, I intensively focused on Free Software-related texts in order to identify ideas and concepts discussed by list participants. However, choosing the end date of the time period was difficult. Because all the list messages were somehow closely related with each other and the messages were continuing discussions. Nevertheless, I read 824 list messages and analyzed them with the particular consideration of the main themes of each message text[4].

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1 Johnston cites from Sewell W. 1980. Work and Revolution in France. Cambridge: Cambridge University Press, p. 8-9.

2 For the development in the number of subscribers to the mailing list, list-en@oekonux.org, and the number of messages sent to the list, see Appendix A.

3 http://www.oekonux.de in German and http://www.oekonux.org, in English.

4 I read each message between those dates and tried to determine the themes for each of them. For

I should admit that the analysis was not so easy for me. The real challenge of this study was making a discourse analysis from mails. On the one hand, the mailing list subjected to this study is in the usual form of discussion list. Access is free and all sides have the possibility of articulating their own position. Actually, the list, with its ongoing flows of conversation, constitutes a kind of alternative community for discussing the Free Software phenomenon and its social implications including the possibility of an alternative society. Except from some technical aspects - no cross-posting to other lists to prevent replies from the other lists; no document or mail attachments to protect the list from danger of a virus or worm; replying to a mail only if the reply is related to the mail that are replied to, on the contrary, writing the mail under a new thread if it presents something new; and giving decent subjects to the messages to help people for understanding the message context[5] - there is no rigid restrictions in the list. Everyone willing to discuss the Oekonux Project and Free Software related issues is welcome to the list. On the other hand, this free form of discussions causes difficulties for a consistent discourse analysis.

The list is in English, but most of the list participants are not native speakers of English. So, it was sometimes difficult to get the subject and meaning of the messages. The themes were mostly imprecise and distinctions among the discussions were blurred. Messages were sometimes overlapped even if they seemed distinct from each other in terms of their subjects. Although I concentrated on the global meaning of texts, the texts were multifaceted. To summarize,

1. I read all messages that were sent between the dates, 13 September 2000 and 20 January 2003.

2. I encoded discussions by considering the concepts in literature and then attempted to list the themes of messages.

3. I examined the frequency of the discussions to be able to find the themes that I would mainly concentrate on.

the themes assigned to the messages, see Appendix B.

5   For the technical aspects of the Oekonux Project, visit http://www.oekonux.org/list-en/archive/msg00133.html

4. However, since this is a qualitative study, I also had a broad and flexible approach towards the categories of the themes. Therefore, I also bare in mind the themes that were rarely discussed.

Nevertheless, linking the concepts from the texts quoted, structuring them in a clear and convincing way and presenting the discussions relying on the theoretical perspective that I framed were really challenging work.

Actually, the subject of this thesis is not a conventional one and I think that my industrial engineering background helped me to succeed in writing about such a subject. I was able to look at the issues from different points of view. I attempted touching on different discussions in the list and tried to evaluate the FSM by using them. The FSM has a longer history, which is nearly 20 years-old at present, and year after year the number of people who recognize the potential importance of the Free Software and its expansion to other fields are increasing. Certainly, I do not claim that the study is complete. I think that the subject of this thesis includes more fertile discussions than the ones presented here. I present this study both to contribute to the discussions within the FSM and to remark the discussions of people, who believe in alternative world different from the world than capitalism presents.

CHAPTER 2

THEORETICAL FOUNDATIONS

2.1. Information Capitalism

While differing over details, it is unanimously claimed that the world has shifted from the industrial age to the information age, which is heavily based on knowledge. This major shift gave another name to the world: 'information society[6]. However, information has always been important for human societies. Although the emphasis on information was limited in industrial societies, it was always the essential element of the production process, which must also include the use of material, labor and energy. Information was always there. If so, as also Schiller (1997:104) asks, "How, then, to identify and distinguish 'information societies'?". How far the current development of information technologies differ from other technological changes in previous history? What are major shifts and basic transitions, which make information so much central? Does information technologies really cause a new society, which will be different from the present one? or does it just help to strengthen the today's capitalist society, which we already know? In other words, are we witnessing really different technological phenomena never seen before by the humanity? or are we just ignoring historical facts?

It is an unquestionable fact that the emphasis on information has inreased especially since the second half of the 20th century. Today's societies mostly exist in high information density. Together with the advances in information technologies,

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6 According to Lyon (1988:2), 'information society' is not entirely a new idea. For him, the roots of it can be traced to the literature of 'postindustrialism' together with the discussions about the 'service' or 'leisure' society. However, he argues that 'information society goes beyond postindustrialism'.

especially in communication technologies, information can be collected, encoded, manipulated and transmitted unlimitedly without considering a space. According to the claims of postindustrial theorists[7], several interlinked transitions brought information to its central position of today: the work was reorganized within modern technologies; the number of knowledge workers grew and their status changed; the capacities of microelectronics increased astonishingly; international division of labor changed; applications of information technologies unfolded extremely and so on (Schiller, 1997). Moreover, the agencies of information and communication, and the decision makers determining policies now have the power to interfere the crucial dimensions of our daily life, such as 'the body', 'sexuality', 'cognitive and emotional processes', 'the structure of the brain', 'the genetic code', etc., through 'the production and processing of information' (Melucci, 1994:101). Consequently, it might be claimed that we live in a world based on the widespread codification of information, which constitutes the distinctive aspect of information age (Perelman, 1998).

Doubtless, all these changes with the extensive usage of information technologies and astonishing information-based innovations provided indispensable areas and opportunities for the capitalist accumulation. Lyon (1988) claims that even the political state of the information capitalism is determined by the activities of stateless economic interests of giant international corporations, like IBM, Intel, AT&T, Siemens, etc. He notes that the main logic behind technological change is to restructure capitalism so that these corporations may better compete in the global marketplace[8]. On similar lines, Castells (1991) attempts to analyze the interaction between the new information technologies and the restructuring of capitalism. According to him, the structural crisis of capitalism in 1970s were accomplished by the extensive use of new technologies and then the potential offered by these technologies helped the restructuring of capitalism (Castells, 1991).

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7 According to Schiller (1997:105), postindustrial theorists agree on the distinctive characteristics of information that stems from its 'anomalous nature' and 'inherent properties'. For him, this agreement leads them 'information exceptionalism', which "...provides specific basis for post-industrialism's claim that the social order is lifting off and rocketing toward parts unknown".

8 Lyon (1988) gives reference to Webster F. 1986. The Politics of new technology. Socialist Register (ed. R. Miliband). London: Merlin. pp. 385-413.

Ultimately, capital seems to attain much power when compared with the perivous epoch. Nevertheless, the usage of information technologies in 'information society' can not so easily be dismissed as if it is a part of the innovative logic of capitalist exploitation. In fact, it will be more useful to discuss the problematic issues of 'information society' rather than attempting to decide whether or not the information technologies strengthen capitalism by helping to restructure itself and giving it much power.

2.1.1. Information Economy

As a part of the claim that the state of the world has shifted from industrial society to the one that is based on information, it has also become popular to assert that the state of the economy has also started to change towards an economy based on information. Actually, all the technological and therefore social changes of the 20th century, especially the invention of the Internet have required a new understanding of the economy, which is called as 'New', 'the Internet', 'Digital' or 'Gift' Economy while differing over details. Whatever it is called, it is a noticeable fact that the new state of the economy gives a fetishistic importance to information. However, the revolutionary aspect of the information age is not the information itself, that suddenly and magically becomes important, but 'the treatment of information as a commodity' and private property within this new state (Perelman, 1998:4).

As Marx (1971:59) clearly defines, in the capitalist economy, first the product is converted into a commodity, which is 'a pure element of exchange'. Then commodities become exchange value. This is how the logic of capitalist economy works. For him, at the end of this process, the commodity apart from the product possesses a dual form as a 'natural product' and an 'exchange value' (Marx, 1971:59). Actually, the separate existence of exchange value is money, which is itself a commodity. As a result, money becomes: "(1) a standard for the measurement of the exchange of commodities; (2) means of exchange; (3) representative of commodities (and thus the object of a contract); (4) as a universal commodity alongside special kinds of commodity" Marx (1971:60). He states that

> The more production is shaped in such a way that every producer depends on the exchange value of his commodities, i.e. the more the product really becomes an exchange value, and exchange value becomes the direct object of production, the more must *money relationships* develop, as also the contradictions inherent in this money relationship, in the relation of the product to itself as money (Marx, 1971:60).

Actually, it is impossible to abolish the implications and contradictions due to the money by just changing the form of money and to abolish money totally, so long as 'exchange value remains the social form of products' (Marx, 1971:60). For him, the exchange relationship in the capitalist society becomes 'a force externally opposed to the producers, and independent of them' (Marx, 1971:61). In other words, exchange relationship becomes 'alien' to the producers. Thus, money and exchange relationships create some sort of alienation.

After the treatment of information as a commodity and private property, this money economy shifts to a different state. In fact, it is asserted that "What is known as the new/Internet/digital economy is indeed the plain old money economy on new territories. What this economy does is to try to make profit from things which are inherently not profitable" (Lovink, 2001:5). However, Barbrook approaches to the subject of the new economy from a different perspective. For him, the new state of the economy is a mixed[9] and 'hi-tech gift economy'[10], that "...heralds the end of private property in 'cutting edge' areas of the economy" towards a future of 'anarcho-communism' (Barbrook, 1998:9). He notes that

> Within the developed world, most politicians and corporate leaders believe that the future of capitalism lies in the commodification of information.... Yet, at the 'cutting edge' of the emerging information society, money-commodity relations play a secondary role to those created by a really existing form of anarcho-communism. For most of

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9 "...it includes a public element (...); a market-driven element (...); and a gift economy element..." (Terranova, 2000:35).

10 "Yet, despite their Hegelian modernism, the Situationists believed that the utopian future had been prefigured in the tribal past. For example, tribes in Polynesia organised themselves around the potlatch: the circulation of gifts. Within these societies, this gift economy bound people together into tribes and encouraged cooperation between different tribes. In contrast with the atomisation and alienation of bourgeois society, potlatches required intimate contacts and emotional authenticity" (Barbrook, 1998:3).

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its users, the Net is somewhere to work, play, love, learn and discuss with other people. Unrestricted by physical distance, they collaborate with each other without the direct mediation of money or politics. Unconcerned about copyright, they give and receive information without thought of payment. In the absence of states or markets to mediate social bonds, network communities are instead formed through the mutual obligations created by gifts of time and ideas (Barbrook, 1998:6).

He sees the new economy of cyberspace as 'an advanced form of social democracy' (Barbrook, 1998:11). However, for Terranova (2000:36), "...Barbrook overemphasizes the autonomy of the high-tech gift economy from capitalism". Actually, she states that

> The processes of exchange that characterize the Internet are not simply the reemergence of communism within the cutting edge of the economy, a repressed other that resurfaces just at the moment when communism seems defeated. It is important to remember that the gift economy, as a part of the larger digital economy, is itself an important force within the reproduction of the labor force in late capitalism as a whole (Terranova, 2000:36).

Behind her skeptical look at digital economy, Terranova (2000: 38) attempts to find an explanation for the coexistence of discourses that see digital economy as 'an oppositional movement and as 'a functional development to new mechanisms of extraction of value'. Nevertheless, it might be claimed that the gift economy as a part of this digital economy poses the problem about the property system of capitalist economy. Intellectual property helps us to see the illusionary feature of the private property, that is, the property issue is no longer about the possession, but about the control and the digital or the Internet economy has contributed it.

As Perelman (1998:80) states, in the system based on private property, property rights exist for 'the exclusion of others from accessing property without the consent of the owner'. Actually, something is privatized to remove it from the common. Property rights also allow people to create scarcity and then economize on scarce resources. The logic of the capitalist economy similarly creates intellectual or informational property rights useful for creating scarcities, which naturally do not

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exist. However, the logic of scarcity, which is central to the market economy, is not applicaple to information. Since information is assumed as 'nonrivalrous'[11] in economics, it differs from other scarce resources. So, it might be claimed that the tangible form of private property has changed. The value of intellectual property is something intangible. So far, intellectual property as a new idea seems really a revolutionary concept. However, Perelman (1998) claims that this innovation brings about a fundamental contradiction between the market and the information economy. According to economics, 'goods should be priced at their marginal cost', that is, 'the cost of producing one more unit of production' (Perelman, 1998:88). It is a fact that the marginal cost of information is approximately zero. This makes information naturally a public good[12]. So, it is invalid to price information as a scarce resource. On the contrary, it should be free. However, in the current state of economy, information is very expensive, therefore, becoming less of a public good. Despite the manifest importance of information in the production process and information economy, access to information is restricted with strategic reasons of the market and control over the information becomes important as much as ownership of the material property and capital. For Perelman (1998), this creates a paradoxical situation, that is, information economy seems inconsistent with the traditional market system and basic concepts of economics.

Actually, according to Perelman (1998:23), "A good portion of the apparent growth of the information sector is nothing more than an illusion, arising out of changes in the organizational structure of the economy". For him, despite the advanced developments in computer technology and its 'ubiquitous' computer, we are far from preparing ourselves for a real information economy. Although it might be accepted

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11 If something is consumed, less remains for the others. Similarly, if something is stolen, the owner of it loses his/her stolen thing. There is physical loss in both cases. On the contrary, when a copyrighted work is copied, the owner still has his/her copy. Nothing physical is consumed or stolen. While the scarce goods are called as 'rivalrous' in the jargon of economics, 'information is nonrivalrous' (Perelman, 1998:87).

12 According to economists, something is a public good, if the marginal cost of it is negligible compared to its cost. In fact, Perelman (1991:199) claims that "Computer software might be called a meta-public good". In the case of meta-public good, the marginal cost is zero like the pure public good. The difference is that 'each additional user confers a benefit on the other users'. Hence, 'the cost per unit of benefit from a meta-public good' would decrease exponentially as the number of users benefited from the software increased.

that exclusion emerges from the logic of capitalist society based on the protection of private property, it should be kept in mind that treating information as a private property has been making the information capitalism and its applications more threatening.

Briefly, Perelman (1998:88) claims that "...as our economy becomes increasingly dependent on information, our traditional system of property rights applied to information becomes a costly fetter on our development". For Perelman (1991:208), 'laissez-faire tradition failed to take account of changing conditions' in the system. According to him, 'neo-classical economics became more and more a parochial ideology, abstractly tied to the narrow interests of business. In fact, we have been witnessing 'the simultaneous slowdown of 'the rate of productivity' with 'an explosion in scientific and technological knowledge'. He intends to point a 'new, co-operative economy', capable of taking advantages of the new advances in technologies while providing a less demeaning life for the majority of people.

2.1.2. Information Work

Information society has seen important changes about laboring practices and workplace for production together with the diffusion of information and communication technologies. The new technologies and their instruments, such as laptops, cellular phones and the Internet, have caused the reorganization of work. As Terranova (2000:34) states, the Internet, have supported 'flexibility of the workforce', 'continuous reskilling', 'freelance work' and 'the diffusion of practices' such as home office. On the one hand, it has made flexible, networking collective intelligence easily come into being without considering space. On the other hand, it blurred the territory between production and consumption. In fact, this type of flexibility has also brought about irregular and definitely longer work hours. Actually, Terranova (2000) attempts to embody the Internet as a means of 'free labor'. According to her, "The process whereby production and consumption are reconfigured within the category of free labor signals the unfolding of a different (rather than completely new) logic of value, whose operations need careful analysis"

(Terranova, 2000:35).

On similar lines, Sennett (1998), warns against 'flexibility', as the new emphasis of capitalism. In today's capitalism, the work has changed from the routine to flexible. However, "The time of flexibility is the time of a new power. Flexibility begets disorder, but not freedom from restraint" (Sennett, 1998:59). Sennett (1998) specifically discusses the personal consequences of work in the new capitalism. In the high tech environment of the new capitalism, everything is user-friendly. However, this user-friendly technology has increased the sense of helplessness among the deskilled, blue-collar workers operating the machinery. Although their work is computerized, they do not have 'any larger vision of different future, or knowledge about how to make change'. "The work is no longer legible to them, in the sense of understanding what they are doing" (Sennett, 1998:68). This results in that workers no longer appears so much to be included within the production process; rather they come to relate more as watchman or regulator to the production process itself.

On the contrary, the process operates reversely for higher levels of technical work (Aronowitz and DiFazio, 1994). The use of computer or new technology in work has increased the skill level of technical or white-collar workers and stimulated them to think. Lyon (1988) similarly claims that high skill levels and communal patterns of work organization within the knowledge workers enabled them to see more clearly the contradictions inherent within the capitalism.

2.2. Image of A New Society

In his brilliant book, Sennett (1998:10) describes the new capitalism as an 'illegible regime of power'. For him, "...the new order substitutes new controls rather than simply abolishing the rules of past - but these new controls are also hard to understand". Actually, critical examination of the new state of capitalism and a realistic forecast about the future's social order ought to be considered with the social analysis of new technologies with their all possible consequences.

According to Marx, nature and the production process are transformed by human activity using the means of production, (i.e. technology), to transform the material into any kind of product by using energy and knowledge (Marx, 1973). As Dyer-Witheford (1999) cites from Marx's comprehensive works, Capital and Grundrisse, the capitalist uses the machinery and technological innovations as a means of its subjugation. For Marx, this increase in the usage of automation technologies, which reduces the need for living labor, will cause a subversion, thus a dissolution in capitalist society (Dyer-Witheford, 1999). In contrast to the imagination of Marx, today, there seems no evidence for a dissolution of the capitalism. The emergence of the new information and communication technologies and their 'ubiquitous' apparatuses, like computer, have caused transformations in the operations of industrial society. According to Lyon (1988), these changes are more of degree than kind, when it is thought that the state power of state and control mechanisms of it has increased. Indeed, it might be claimed that we live in a control society. Each day, we are leaving huge amount of information about us in everywhere. Computerized forms of surveillance are increasing together with the advances in new information technologies. It is a fact that modern technologies and their instruments have facilitated monitoring all people in a society[13].

According to Perelman (1998:1), "...the reality of the information age falls considerably short of the futuristic vision of the information age". He points that dark side of science fiction or dystopian version of the future seem to be closer to the truth than the imaginary utopias of the being lived information age. While rolling in the muck of the capitalism, it becomes difficult to find an answer to these question: "What sort of sharing is required to resist, rather than to run from, the new political economy?", "What kind of sustained personal relations in time can be contained in the use of 'we'?" (Sennett, 1998:139). Perelman states that,

> Our current methods of production threaten to cause many forms of environmental destruction. We must pin our hopes for avoiding disasters on careful management of our resource base; in other words,

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13 For example, massive databases about the great mass of people make possible coding and manipulating every aspect of an individual and provide power to both public and private agents (Perelman, 1998).

public agencies must take measures (or force firms to take measures) to monitor or restricts environmental hazards created by an individualistic profit seeking capitalist society. Consequently, our very survival may depend on the quality of information that we can generate (Perelman, 1991: 188).

To characterize the information society as a new state of capitalism, which seems empowering itself with the information and communication technologies should not be the end of the story. "Capitalism is not a timeless category" (Kumar, 1995). What Perelman suggests is that treating information as public knowledge rather than enclosuring it as a property will extend our future welfare (Perelman, 1991).

In contrast to the argument that information technologies will bring us to a classless society, Perelman stresses that 'the process will reinforce existing class structures'[14] and 'a proper understanding of classes and technology is crucial for making intelligent choices about the kind of society that we create for ourselves'[15]. Lyon (1988) claims that the critical question will be whether or not information technologies and their associated industrial and social processes actually help change the rules of the game. Actually, Lyon (1988) has three kinds of arguments. According to the first argument, which is 'class rejected', new technologies and therefore technological revolution cause abandoning class structure. For the second, which is 'class reasserted', th new information technologies give much power to capitalist class for tighter social control. Accoring to the third and the last argument, which is 'class reconceptualized', the new technologies realigns classes and cause releasing new social movements by tilting the balance of power in different ways. In such world we are experienced more individualism, which promises isolation rather than freedom, the FS advocates are signifying important values. While we become and feel more isolated individuals, information age makes the existing class structure more complex and intensify it contrary to promising a classless society.

We are challenged everyday in new state of the capitalism and this is forcing us to new domains of experiences and structural changes. People are struggling in a new

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14 Perelman (1998:4)
15 Perelman (1998:5)

battleground based on information and this struggle has already started to shape and manipulate their future, which is difficult to estimate before. Having an open mind for the uncertainty of the future, even if it scares us, could be a more plausible attitude. It should be beared in mind that history does not unfold according to a periodization scheme or an underlying plan and the future of human condition can not be predicted according to this scheme. While 'the technology of production' is changing, it is not so possible to assume that 'all social arrangements', 'all hierarchies, all ideologies of entitlement' remain as they are (Boyle, 1996).

2.3. Social Movements

While discussing a transformation or a radical change within the conditions of existing system, social movements are crucial to be interested in. They can be accepted as signs of transformations and possible changes in societies. Their challenge to the basic institutional structures of modern society indicates the existence of crucial dilemmas of the current system. They have unique histories. Therefore, despite all the studies, they continue to be surprising phenomena. We can find some set of discourses and approaches to theorize and explain social movements, but the concepts and cases about them are still highly debatable. Nevertheless, the 1960s might be assumed as the starting point for recent debates on social movements.

The increased social conflicts in 1960s, especially the movements of 1968s were tried to be explained by two major theoretical models: the Marxist model and the structural-functionalist model (della Porta and Diani, 1999). The Marxist model interprets the social conflicts by relying on the concept of class, which has the most central importance in the Marxist theory. For Marx, who introduced the concept of class in social theory, class is not 'a question of size of income, amount of wealth, occupation, life-style, birth, background, etc.', but fundamentally 'a matter of relationship to the means of production' (Hamilton and Hirszowicz, 1989). According to Marx's concept of class, any class system has two major classes[16],

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16 "...in a capitalist society, there are two basic or significant classes, the bourgeoisie, and the

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which are 'interdependent' and 'antagonistic' to one another and this antagonism is accepted as 'the driving force for social change' (Hamilton and Hirszowicz, 1989). However, the conflicts of 1968 had different bases from the class. As becoming different from the Marxist perspective, the structural-functionalists, in particular Neil Smelser, interprets social conflicts as the deviations from the normal state of society. Smelser saw collective behavior as irrational and temporary movements which emerged as a response to structural changes due to modernity (Çayır, 1999). According to him, social movements were the symptoms of a sick society and responses to its abnormal conditions (Mamay, 1991). As Çayır (1999:14) stressed, the claim behind this Smelserian perspective was the argument that the real dynamics of change lied down in history, not in society and the reason for change was not social conflicts and movements, but the historical necessities. Since the social movements of 1968s were neither class-based social conflicts nor reflection of any social malfunctioning, both the Marxist conception of class and Smelserian structural-functionalist viewpoint were inapplicable in analyzing them. Actually, the emergence of new forms of collective action in advanced industrial societies in 60s and 70s has shown that these two models were inadequate to explain them. So, the meaning of social movements had to be re-conceptualized. Those movements are called as "New Social Movements" (NSMs) against the conventional ones.

The early studies on social movements were usually focused on class-based collective actions. Most of those collective actions were organized to gain an economical interest and to obtain a political power. Traditional worker movements are good examples of class-based collective actions. They were communal and their aim was to transform the distribution of resources by restructuring the existing political power. By speaking in a wide range of social movements literature, the term 'New Social Movement' (NSM) has been used to refer to the movements usually organized around different issues. They are the movements with a single broad theme, such as, ecology, peace, women's rights, anti-nuclear energy, minority

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proletariat, defined in terms of relationship to the means of production. The bourgeoisie consists of the owners of the means of production. The proletariat consists of those who are excluded from ownership of the means of production and who have nothing but their own capacity to labour which they must sell in the market in return for wages" (Hamilton and Hirszowicz, 1989:5).

rights and nationalism, gay and lesbian rights, animal rights, alternative projects having economical, social, and cultural background, etc. At first view, it might be said that the NSMs are motivated by cultural aims, differing from the worker movements and they are not concerned with conventional forms of political participation. They give importance to the conflict, which is different from worker's negotiation with political power, and produce new identities and collectivities. The main question about NSMs is whether there is really a 'new' thing in them. According to Plotke (1995:122), "...contemporary collective action really is about culture, not merely about the cultural expression of class elements". Although he states that this is not new for the social movements, he stresses the explosion and powerful return of cultural themes in late 1960s as a radical separation from traditional interpretations of the same dynamics (Plotke, 1995). Actually, there can be cited to various references for the emergence of NSMs and novelties of these new collectivities by giving different answers to the question, "What is so new about NSMs?".

Hirsch (1988:44) argues that the emergence of the NSMs should be examined "...within the context of massive criticism of traditional leftist concepts of political organization, class struggle, and revolution in the post war period-concepts that often failed and that proved historically discredited in many ways". According to him, the crisis because of the very rapid transformation of social structures in Fordist form of political organization - the destruction of traditional social structures, the increase in social individualization, the commodification of social relationships, overwhelming bureaucratization of life and so on - provoked the new forms of social and political conflicts in 60s and 70s (Hirsch, 1988). After the explosive emergence of somehow new forms of collective actions in advanced industrial societies, the meaning of social movements had to be reconsidered and therefore they have been expressed as the NSMs.

Claus Offe, an important figure in identifying the different characteristics of the NSMs, approaches to the emergence of the NSMs from a different perspective.

From the years after the war to the beginnings of 1970s, 'old paradigm'[17] for social, economical and political order was liberal welfare state model, and the agenda of politics of West Europe was economical development, welfare distribution and security[18] (Offe, 1985). As Offe (1985) stressed, the indirect assumption behind the structural applications of the liberal welfare state was that 'family', 'work' and 'consumption-based life style' would be much more important for most people rather than the participation to public politics and conflicts in those politics. According to him, the NSMs starts from the area of 'non-institutional' politics, which are not considered within the liberal democracy and practices of the welfare state.

For Touraine, the NSMs can not be understood within the logic of the industrial society. He examines the NSMs in his post-industrial society paradigm (Çayır, 1999). Although he disagrees with 'the postindustrial assumption that class struggle was a thing of the past'[19], he examines post-industrial society as a new society with a different pattern of class relations and conflicts, which has a socio-cultural base rather than a socio-economic one (Mamay, 1991). In his article, cited from his book, *Return of the Actor,* Touraine defines social movements as conflicting behaviors rather than a reaction to any social situation. For him, the NSMs are new indeed, because they emerge from the struggles of social actors within the structures of civil society (Touraine, 1988).

Briefly, the NSMs bear potential for the development of new concepts in existing social and political structure of a society. For Touraine, the struggling area of the NSMs is civil society, rather than the state which is typical for conventional movements (Çayır, 1999). The NSMs bypass the state to defend the power of civil society. Following Hirsch's argument (1988:49), the NSMs with "their decentralized

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17 Offe calls the political paradigm, which dominates the years after the World War II, as an 'old paradigm' and analyzes it in terms of its values, issues, actors and institutional practices.

18 Offe talks about three important dimensions of security concept. First one points the applications for all people to provide them a precise standard of living and a proper income, and to secure them in the case of illness, unemployment and necessity. The second involves the issues about military strategies and defense, prevention of military crisis by means of the politics related with the international organizations and Third World and continuous modernization of defense industry. The last one involves social control, that is, prevention family, legal, economical and political order from all deviated behaviours.

19 (Lyon, 1988)

organizational form, social heterogeneity, fluctuating and localized targets and goals, and predominantly anti-state, anti-bureaucratic and, in some sense 'populist' character" are open to the possibilities of new modes of societalization. For Offe (1985), the NSMs are different from the movements in 'old paradigm' in terms of their actors, movement themes, and movement forms. According to his analysis, the novelty of the NSMs with reference to actors is their usage neither the given political codes such as left or right, liberal or conservative, nor the socio-economic ones such as worker or middle class, poor or rich and so on. The themes of the NSMs show diversity. They oppose to bureaucratization, arrangements, social control, manipulation, dependency, security and so on, which are imposed by the current system. Although these values are not so new in their contexts, they gain different meanings together with the NSMs. Finally, the forms of movements differ. Internally, they do not have any organizational differentiation. In contrast to conventional social movements, which might be characterized as hierarchical, the NSMs contain relationships within a flat structure. Externally, they use tactics for their protest and resistance, which is different in those practiced by the conventional ones. In fact, they are organized around specific, often single and broad local issues. By opposing the given values and norms, they prefer direct action by using unconventional methods. In their methods, they are more innovative than the conventional ones, which use the established political order to make a change. They are anti-hierarchical and their members shift around fluctuating goals. Briefly, the basic aim of the NSMs is the extension of personal and group autonomy by conflicting with the existing social or political order and challenging with the restrictions applied by the authority.

Ultimately, the NSMs might be assumed as 'new' because of their socio-cultural bases. Actually, cultural elements have more weight in the NSMs compared with the traditional movements. The NSMs try to make a change in the existing cultural structure by arguing the language of the dominant system and developing alternative languages. As Çayır (1999:18) cited from Habermas, new conflicts directly focus on 'the grammar of life' rather than 'the problem of sharing the resources'. This shift also involves the conflicts over the identity, showing an unstable and contested

character. For Touraine (1988), these actors produce the historical conditions rather than just being a figure in history. Those conditions are created by actors who are quite conscious and innovative about their behaviors. In order to explain these new movements, new approaches, which are not mutually exclusive but having different directions, have emerged. Each perspective concentrates on different parts of the emerging mechanisms of social movements in analyzing transformations of structural strains into collective actions.

2.4. Different Theoretical Perspectives on Social Movements

As stated before, the increased social conflicts and movements of 1960s showed a great deal of difficulties experienced by two major theoretical models: the Marxist model and the structural-functionalist model in interpretation of social conflicts and collective actions. Actually, the 'American' and 'European' historical traditions caused different reactions to overcome these theoretical difficulties in two continents (della Porta and Diani, 1999).

In 1960s, the structural-functionalist model, especially Smelserian perspective, explained social movements as the temporarily irrational responses to the abnormalities in a sick society. In America, the strong critique of this perspective caused the emergence of the interactionist version of collective behavior (della Porta and Diani, 1999). As della Porta and Diani (1999) summarized, the advocates of this new approach, such as Ralph H. Turner and Lewis M. Killian, have revised the Smelser's approach and emphasized that collective behavior are actions to produce new solidarities rather than just being simply responses to any social crisis. This contemporary version of collective behavior perspective saw change as a physiological part of a system and a potential reason for social movements, aiming to transform the existing social structures and creating new values. Despite their major contributions to the analysis of collective behavior, the interactionists continued to see social movements as reactive behaviors deprived of strategic rationality. However, in 1970s, American sociologists have started to treat social movements as quite rational behaviors having a strategical thinking and decision

making rationale. Becoming radically different from their predecessors, American sociologists have given more attention to the resources organized for the particular purpose of collective actions. They have called their approach as *Resource Mobilization* (RM), which mostly rests on American empirical studies and extends in the American Social Science.

Briefly, the RM approach has concentrated much more on political processes and economical analysis in understanding the social movements instead of resting heavily on discontents in the population. As Zald and McCarthy (1987a) stressed, both the collective behavior and its following interactionist version believed that, increased grievances upon the existing structural conditions which transform to collectivities, should have occurred before the emergence of social movements. Therefore, the strong emphasis behind much of the empirical work was to understand the psychology of the existing or potential members of the analyzed movements. However, American empirical studies on social movements, mostly made in 1970s, showed that there is not a quite close link between the discontents and the emergence of social movements. As Zald and McCarthy claimed, the RM approach was also used by American conservatives in the past (Zald and McCarthy, 1987b). Those conservatives emphasized the concepts, such as "outside resources", "outside agitators" and "the communist conspiracy", and saw those concepts as the actual creators of social movements by devaluing the grievances of collectivities and their organizers. In addition to rejecting this right-wing analysis, Zald and McCarthy specifically tried to understand the organized groups and the acquisition process of the mobilized resources, such as money, materials and labor. As they so-call themselves, Zald and McCarthy have an alternative standing in RM approach (Zald and McCarthy, 1987a). Tilly, one of the most important figures in the RM approach, explains conflicts by looking from a different perspective (Çayır, 1999). According to him, the emergence of social movements is the expression of struggling of rejected or marginal groups to participate into the system. In his major book, *From Mobilization to Revolution*, he discusses the strategies for the study of mobilization, the struggles for power and the related political processes (Tilly, 1978). He emphasizes six common determinants of a group's collective action and

mobilization, which are (1) the extent of its shared interests, (2) the intensity of its organization, (3) its mobilization by adding three more ones as 'repression', 'power' and 'opportunity/treat'. To conclude, the RM perspective emphasizes economical or political characteristics of the conflicts created by the social movements (Çayır, 1999).

The most important separation point and maybe the most innovative part of the RM approach from the collective behavior perspective and interactionist version of it is its emphasis on social movements as conscious, rational, purposeful and organized collective actions. However, the RM perspective restricts itself to the strategic usage of the power and just focuses on economical or political dimensions of current conflicts. For example, Tilly is criticized due to his analysis of social movements as strategic struggles and his attempt to reduce the society to power relations without giving any reference to the social system (Çayır, 1999). On the contrary, Melucci (1994:106) attempts to ask "...if there are dimensions to the new forms of action that we should assign to a systematic context other than that of industrial capitalism". He claims that this question is excluded from the critics of contemporary social movements, like Charles Tilly, who analyzes new movements specifically on a political level by dismissing the cultural dimensions of them. Actually, it is argued that Tilly's analysis does not give an answer to some critical questions, like "Do contemporary movements reveal systematic conflicts that are unrelated to those of industrial capitalism?"[20] or "If a social movement does not want to enter the political area, how can it be signified?"[21]. The missing answers and the deficient parts of the RM approach seem to be supplemented by the NSMs approach.

In contrast to American historical tradition, the great deal of criticism subjected to Marxist theoretical model and its inapplicability in understanding the new movements[22] caused the development of the *New Social Movements* (NSMs) approach, mostly prevalent in European Social Science. Actually, the NSMs

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20 Melucci (1994:107)

21 Çayır (1999:22)

22 In fact, della Porta and Diani (1999:3) claims that "In Europe, emerging social movements borrowed many characteristics from the worker's movements, including a heavy emphasis on ideology".

perspective considers the socio-cultural dimensions of social movements, which signify a change in the existing values, norms and identity structures, rather than considering the political dimensions of them, which aim a change in the existing political structures (Çayır, 1999). For Touraine (1992:372), one of the most important figures of the NSMs perspective, "it is surely impossible to dissociate the concept of social movement, thus defined, from the representation of social life as, simultaneously, a set of cultural representations through which society produces itself and all the aspects and consequences of a central social conflict." According to him, organization perspective based on a 'direct conflict between the logic of managers and the logic of workers' has been replaced by a system perspective based on 'the circulation of information'. In this new form of society, 'the American concept of minority' is a more powerful expression than 'the European concept of social class' in order to understand the reality and the social life itself (Touraine, 1992). For Touraine (1992:391), "In brief, the old social movements were associated with the idea of revolution, the new ones are associated with the idea of democracy." Melucci agrees with Touraine at the point that the post-modern world creates new forms of social control and conflicts, but he specifically stresses the symbolic character of the NSMs (Çayır, 1999). In this highly informed world, "Conflicts are carried forward by temporary actors who bring to light the crucial dilemmas of a society" (Melucci, 1994:102). Unlike anti-capitalistic social conflicts of workers' movement, the new non-institutionalized collective actions realize in the social network, in which a collective identity is shaped through the struggles or collectivities with different social groups (Melucci, 1994). They inquire the definitions of codes and significance of reality (Melucci, 1985). For Melucci (1994), the NSMs have 'an antagonistic nucleus'. In this antagonism, they endeavor for 'the ability to give a different name to space and time by developing new languages that change or replace the words used by the social order to organize our daily experience'. They create new goals and new languages by selecting new elites.

When compared with the RM perspective, the NSMs perspective focuses on the construction of identity in civil society. For Melucci (1994), contemporary social movements separate themselves from political systems and the traditional model of

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political organization. He claims that,

> The notion of class relationships has been a tool with which to analyze systemic conflicts and forms of domination in complex societies.... In systems like contemporary ones, where classes as real social groups are withering away, more appropriate concepts are required (Melucci, 1994:103).

The NSMs perspective basicly focuses on the cultural dimensions of contemporary movements. However, this causes omitting the political effects of them. In contemporary world, there are new forms of collective actions and movements that should be analyzed with their political, economical and cultural dimensions.

In the following chapter, the detailed description of the FSM will be presented. The chapter will explain the dynamics for the emergence of the FSM in a historical context and then continue to explore the main themes and concepts of the movement by referencing the literature review made on the FSM. It will also introduce the Oekonux Project, which is a project for the discussions about Free Software and its possible social implications including the possibility of a new society.

CHAPTER 3

FREE SOFTWARE MOVEMENT

> The first half of the twenty-first century will,
> I believe, be far more difficult, more
> unsettling, and yet more open than anything
> we have known in twentieth century
> (Wallerstein, 1999:1).

3.1. Copyrighting Intellectual Property

The history of copyright shows different historical developments in Europe and
Asia. As Bettig (1996:13) cites, the question of 'why copyright emerged in Europe
and not in Asia' may be explained with 'different cultural attitudes, social
organization, and legal conceptions' in two continents[23]. For example, in the oral
culture of ancient India, 'what was said' was more important than 'who said what[24].
It is also remarkable that "Until 1991, the People's Republic of China did not have a
copyright system, reflecting the fact that the concept of intellectual property also did
not exist in the societies of Southeast Asia" (Bettig, 1996:13). Briefly, for the
people of Asia, all artistic and intellectual production were assumed as 'anonymous',
'community-oriented' and 'participatory process' (Bettig, 1996:13). However, the
history of copyright system was different in Europe.

For Bettig (1996), besides the stated reasons by Ploman and Hamilton, the analysis
of modes and relations of production and communication provides a materialist

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23 Ploman E W and Hamilton L C. 1980. Copyright: Intellectual Property in the Information Age.
   London: Routledge and Kegan Paul.
24 Oliver R. 1971. Communication and Culture in Ancient India and China. Syracuse, NY:
   Syracuse University Press. p. 21.

grounding to understand the emergence of copyright in Europe. Actually, these reasons link the origin of copyright to the dawn of capitalism and the emergence of the printing press in Europe. According to the citations Bettig (1996) made, Venice as an Italian merchant state was the first city in both Italy and Europe in the fifteenth century with reference to the increased importance of publishing and business of printing, thus the foundation of copyright system[25]. By the following century, the similar printing and publishing trade dispersed to many European countries. The history of copyright in Great Britain was also initiated by the printing technologies and evolved with the support of the government regulations. In the sixteenth century, a charter established the Stationers Company, giving it full control over printing and publishing in England for the next 150 years. Thus, the total number of printers and publishers was limited. The progressive commodification of intellectual works, and therefore advanced practices on copyright laws in Great Britain inspired the U.S copyright system. In sum, copyright laws has extended each time to create more exchange value in the hands of the capitalist class.

Indeed, the concept of copyright only makes sense within the context of capitalism and its market economy. As Bettig (1996) states, in capitalist systems, intellectual property rights and laws extend each time, when a new form of human creativity is developed and deployed. Actually, copyrighting is 'an instrument of wealth that can be utilized in the cycle of capital accumulation to generate more wealth'. It is used as 'the basis for expanding market power'. Like copyright, patent is another regulation form to control the intellectual creativity and to commodify the creative human activities in tangible forms[26]. So, the control of the human creativity through the ownership of intellectual property has great importance for the capitalist society. Actually, all the mechanisms, copyright, patents, trademarks, licensing schemes, encryption, and etc., are essential instruments of the capitalist system to control the intellectual property and to legitimate its enclosure of intellectual and artistic creativity. This enclosure creates the suitable conditions for excludability, which is

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25 Putnam G. 1962. Books and Their Makers During the Middle Ages. New York: Hillary House.

26 As Burk (2001:71) briefly describes, a patent application describes 'how to make and use the claimed invention'. Once the application is approved by the Patent Office, where a patent is obtained by submitting to, the inventor or author excludes others for a period of 20 years from making, using, selling, or importing the claimed invention (Burk, 2001).

'the power to prevent usage of a desirable utility, and is required for the property holder to force payment of the user (extract exchange value)' (Söderberg, 2002:10). Consequently, the copyrighted intellectual property gives its creators a legal monopoly to protect against copying and capitalists to perpetuate its economic superiority by creating artificial scarcities.

As an intellectual property, software is produced by wage labor and distributed as a commodified information within the market. However, creating software as an information is much more expensive than copying it. Actually, the cost of copying software approaches zero. The fact is that although the development cost of software is high, duplicating it costs nothing. As Perelman (1991) also stresses, justifying high prices by asserting the costs for pricay does not work for software companies, because selling a public good with a high price cause pricay as a more tempting alternative instead of purchasing software. Nevertheless, they continue to suffer from pricay because of their methods developed for high prices and novel strategies through intellectual property rights[27] (Perelman, 1991). On similar lines, Boyle (1996:3) attracts that the software industry loses billions of dollars related with the intellectual property issue, "Because both the facilities for copying and the market for using information technology have increased in quantum leaps over the last ten years."[28] So, the protection of software as well as other intellectual properties, as value-added products are crucial for the policy of the capitalist state.

Boyle argues that both the protection of software (as their own property) and the limitations on the protection of software (as competitors' property) serve the interests of the large software companies (Boyle, 1996). According to him:

> It is all very well to say that copyright provides incentives to authors and thus encourages the production of more ideas and more information for public consumption. Copyright is a fence to keep the public out as well as a scaffolding for the bilboards displayed in the

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27 The numbers of unauthorized copies for software programs are estimated in millions (Perelman, 1991).

28 "The International Trade Commission claims that foreign piracy of U.S. Intellectual property costs $40 to $60 billion per year. The music industry claims to lose $2.45 billion worldwide. The software industry claims that it lost $15.2 billion in 1994" (Boyle, 1996:3).

marketplace of ideas; it can be used to deny biographers the ability to quote from or to paraphrase letters; to silence parody; to control the packing, context, and presentation of information. To say that copyright promotes the production and circulation of ideas is to state a conclusion and not an argument. At the very least we might wonder if, in our particular copyright regime, the gains outweigh the losses (Boyle, 1996:18).

Boyle (1996) believes that it can be made 'moderate' and 'reformist' proposals for 'the appropriate interpretation of the fair use provisions of the copyright act'. Actually, "...the information age may be constructed in part around the conflicting valences of a romantic individualistic notion of information production, an egalitarian notion of public information, and a positive liberty theory of privacy" (Boyle, 1996:183). On similar lines, Bettig (1996:7) states that the central assumption behind the copyright system is that "...creators of intellectual works need an incentive to be creative" and it exists "...to supply the motivation for intellectual and artistic activity and, more practically, to serve as the source of income from which artists, authors, and other creators of intellectual works could make a living". But he states that the copyright system does not work according to this ideal. On the contrary, within the copyright system, new inequalities are created in the accessibility to information. And to guard all these intellectual property, surveillance becomes more necessary.

3.2. Software Wants To Be Free

Software has created not only economical but also social transformations in today's digital world. At first, it was just the part of a computer system, especially had a reverse meaning with 'hardware'. According to the brief history of softness argued by Moglen[29] (1999), programs as the controller for the basic operation of hardware, were digitally encoded in the electronics of computer equipment and unmodifiable. Thus, softness as in the term *firmware*, had mostly a symbolic meaning, referring to the 'ability to alter symbols determining machine behavior' (Moglen, 1999:23).

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29 Eben Moglen, who has a PhD. in history, is currently a professor of law at Columbia University Law School since 1987, and serves as general counsel of the Free Software Foundation.

However, in today's high technological environment, software refers to human readable language consisting of 'modifiable instructions for describing and controlling the behavior of machines' (Moglen, 1999:30). Software provides people with an environment consisting of tools to understand, create and unfold information. It defines a highly symbolic geography to live on. Software is not just for computer hardware. There is nothing but software in everywhere.

In this soft-world, the last 20 years have seen peculiar protests and fascinating movement in the software industry. People in the status of developer and innovator have been arguing that existing intellectual property system is slowing down the rate of innovation and it should be withered away (Stallman, Garfinkel and Kapor, 1991). In fact, after the software became a value-added product and seperated from hardware, the control over its production and distribution increased. Free Software Foundation[30] (FSF) of Cambridge, Massachusetts, was founded in 1985 as a response to this overwhelming control and pressure. The foundation gave life to a project, GNU operating system, which might be accepted as 'the backbone of the free programming community' (Söderberg, 2002:14). Richard Stallman[31] explains how the GNU project was initiated with the words below:

> So I looked for a way that a programmer could do something for the good. I asked myself, was there a program or programs that I could write, so as to make a community possible once again? The answer was clear: what was needed first was an operating system. That is the crucial software for starting to use a computer. With an operating system, you can do many things; without one, you cannot run the computer at all. 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 (Stallman, 1999:64).

GNU, a recursive acronym of 'GNU's Not Unix', has been initiated to be a free

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30 "The Free Software Foundation, founded in 1985, is dedicated to promoting computer users' right to use, study, copy, modify, and redistribute computer programs. The FSF promotes the development and use of free (as in freedom) software---particularly the GNU operating system and its GNU/Linux variants---and free documentation for free software. The FSF also helps to spread awareness of the ethical and political issues of freedom in the use of software. Their web site, located at http://www.gnu.org, is an important source of information about GNU/Linux. They are headquartered in Boston, MA, USA" (http://www.oekonux.org/list-en/archive/msg00404.html)

31 The founder of the Free Software Foundation (FSF) and primary coordinator of the GNU Project.

alternative to UNIX, which is the proprietary operating system of AT&T. As Stallman (1999) clarifies, GNU system is composed of the programs developed by other people for their own purposes. They can be used because they are developed as free software. Today, GNU signifies the name of the campaign started for freedom. The aim of it is to eliminate the proprietary software and give software freedom.

Actually, the greatest innovation of the Free Software Foundation is the General Public License (GPL)[32], also known as Copyleft. As stated by Stallman (1999), copyleft is used as a distribution method in order to protect developed software or any part of that software from being turned into proprietary software. It intends to guarantee the users' freedom to run, copy, distribute, study, change and improve the software program. On the other hand, It remarks the users about that "...if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights". Ultimately, GPL is for 'to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary'. Although copyleft is inspired from copyright, it reverses it to be able to use for its opposite purposes. In other words, the expression 'Copyright--all rights reserved' is flipted as 'Copyleft--all rights reversed' (Stallman, 1999). According to Moglen (1999:17), "this use of intellectual property rules to create a commons in cyberspace is the central institutional structure enabling the anarchist triumph."

Richard Stallman sees Free Software as a moral issue. He does not care whether Free Software produces better code or is embraced by consumers. In fact, he emphasizes that freedom and community is more important than writing good code. For Stallman, as it is emphasized in the Free Software Definition[33], Free Software is 'a matter of liberty, not price'. Actually, it is about freedom as in the 'free speech',' not as in 'free beer'. However, Weber (2000) talks about a problem with the nature

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32 http://www.gnu.org/copyleft/gpl.html
33 http://www.fsf.org/philosophy/free-sw.html

34

of the GPL. For him:

> Stallman's moral stance against proprietary software clashed with the utilitarian view of many programmers, who wanted to use pieces of proprietary code along with free code when it made sense to do that, simply because the proprietary code was technically good. The GPL did not permit this kind of flexibility and thus posed difficult constraints to developers looking for pragmatic solutions to problems (Weber, 2000:8).

Besides this problem, 'the lack of flexibility inherent in the Free Software Foundation's unforgiving ideological stance' initiates alternative structure, which is known as 'Open Source Initiative', for Free Software in the mid 1990s (Weber, 2000:10). As Weber (2000) explains, in contrast to the GPL, 'the Open Source Definition' does not restrict a programmer to make the modified software proprietary under new terms.

Despite the contractual difference between Free and Open Source Software, both take its power from the collective endeavor of developers. Although, a large number of smart, highly talented and motivated developers around the world choose to allocate some of their time and mind to a project and contribute together for writing Free or Open Source (F/OS) software, it is difficult to say that F/OS Software is based on altruism. According to empirical studies about the F/OS Software development, it is found that people publishing Free Software have a range of individual interests in doing so. The critical question that comes to mind is: what are their motivations? Actually, The Boston Consulting Group (BCG), a global management consulting firm, has made a research about hackers in cooperation with Open Source Developer Network (OSDN) and gathered some key findings according to the results based on 684 usable responses around the world[34]. As a result of survey findings, the Free/Open Source (F/OS) Software community has separated in 4 groups that have different motivations for writing Free Software.

1. The first group is 'Learning & Fun' with the percentage of 29. They think that

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34 The Boston Consulting Group. July 24, 2002. Hacker Survey. Release 0.73. http://www.osdn.com/bcg/

their activities on F/OS projects improve their programming skills. They write F/OS software for skill improvement and fun.

2. The second group is 'Hobbyists' with the percentage of 27. They write F/OS software for non-work needs. They identify themselves with the hacker community.

3. The third group is 'Professionals' with the percentage of 25. In contrast to 'Hobbyists', the people of this group write F/OS code for their work needs.

4. The forth group is 'Community Believers' with the percentage of 19. They believe that source code should be open. Hacking is central to their lifestyle.

In sum, the survey reveals that defeating proprietary software companies is not their major motivator. On the contrary, having fun, improving skills, freedom for access to source code and needs with high levels of creativity in the projects are the key motivations of the F/OS community. Although losing sleep is their biggest cost, increasing knowledge is their biggest benefit. As a remarkable result of the survey, F/OS is a generation "X" phenomenon. The community has 30 years average age and 98% male figure. Consequently, the fact is that we can not ignore Stallman's initiation and F/OS community with its growing numbers each year.

3.3. The Political Economy of Free Software

In the logic of the economics of intellectual property rights, the critical rationale is about creating incentives for providers of information. As also stated before, all the mechanisms and regulations of the system, such as copyright, patent and licensing to control intellectual property, are operated to create economic rents. Capitalist system is based on private property, and therefore property rights. Actually, almost everything has a proprietary 'secret', that is, you can purchase and consume something, but you can never reproduce, improve and distribute your new modified product to the rest of the world. The logic behind the proprietary computer software is similar. You can buy proprietary computer software, use it, but you can not ever

reproduce, modify and redistribute the new version to the others. Actually, the source code of software, which is the core intellectual property and secret upon which the software industry operates, is protected and controlled with the copyright laws. On the contrary, F/OS software operates in a different logic.

According to the logic of F/OS software, the source code is 'free', that is, 'open to public' and 'non-proprietary' (Weber, 2000). Here, being free basically refers to the ability to access, change and release a program's source code, which is the essence of any software. Actually, the definition of Free Software is about four kinds of freedom for the users of the software: "(1) The freedom to run the program, for any purpose (freedom 0). (2) The freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this. (3) The freedom to redistribute copies so you can help your neighbor (freedom 2). (4) The freedom to improve the program, and release your improvements to the public, so that the whole community benefits (freedom 3). Access to the source code is a precondition for this"[35]. Although Open Source Definition is different from the Free Software definition in terms of its flexibility to make a software proprietary, both have important implications for the mode of production in the 'new' economy.

There exist many F/OS projects initiated and maintained all around the world. Linux[36] as an operating system is the most well-known among them and has the most famous story because of its technical and competitive success[37]. It is an example of collective good, which is produced in a non-proprietary way. Actually, the ultimate result of all the F/OS projects, that can not be dismissed so easily, is that "...a large, complex system of code can be built, maintained, developed, and extended in a non-proprietary setting where many developers work in a highly parallel, relatively unstructured way and without direct monetary compensation" (Weber, 2000:3). Most F/OS software has been produced through these

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35 http://www.fsf.org/philosophy/free-sw.html

36 After the GNU was mostly completed in 1992, Linus Torvalds developed the kernel, Linux as a Free Software. Linux and GNU combined as the first free operating system, GNU/Linux, which is the combination of the Linux kernel and the much larger body of GNU Project components.

37 'Perhaps 20 million people worldwide, with an annual growth rate of nearly 200%' (Weber, 2000).

decentralized, community-based development processes, which are usually open to anyone with the right technical skills (or a willingness to learn)**.**

As Söderberg (2002) cites, the technology of property based systems like capitalism is some kind of black box, which is not comprehensible not only by the users with the lowest possible skills but also by the smart ones. Furthermore, the skill level demanded of the average user should always be lessened as expressed in the deceptive phrase user-friendly technology (Söderberg, 2002). The logic for the system operates in a similar manner for the proprietary software. Since the source code of proprietary software is enclosed and can not be used in anyway, its problems or bugs cannot be fixed until the next version is made available to the public. To overcome such technological problems, users should always have a technological knowledge to understand and control the product they use, or else they will have to wait. On the contrary, F/OS software provides developers and end-users with a direct access to its source code, therefore a direct control over its capabilities. F/OS software is non-rivalrous and non-excludable.

A society shaped by human potential could only be real through revolutionary transformation of the existing mode of production (Bettig, 1996). Although, as stated by Marx, the capitalist system is far from providing structures for the development of human potential, sooner or later, the development of the forces of production would democratize the relations of production.

3.4. The Oekonux Project

Oekonux is the name of the project for the discussion about Free Software and its possible social implications, which includes the possibility of a new society. Its initial sparks were seen in the "Wizard of Open Source"[38] conference in Berlin in 1999. Oekonux is an abbreviation of two words, 'OEKOnomie', which is the German word for 'Economy', and 'Linux' (Richardson, 2001). The term is also a recursive German acronym for '**O**ekonux **E**inführungs**k**ladde **o**hne

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38 Visit http://www.mikro.org/Events/OS/frameset_e.html?Submit1=english

Nutzungse**x**klusion' with their translation 'Oekonux introductory blotter without use exclusion'[39].

The project continues to live through the websites, available at http://www.oekonux.de archiving the messages sent to the mailing list liste@oekonux.de in German and at http://www.oekonux.org archiving the messages sent to the mailing list list-en@oekonux.org in English[40]. Subscribers involve developers coming from Free Software and Hardware projects, political persons, people having special interests in cultural subjects and so on. In common, they are interested in the principles of Free Software and the possible consequences of these principles in their particular interest area. Stefan Merten[41], who initiated and is still maintaining the project, defines the main purposes of the project as archiving the mailing lists and presenting the materials created for the project. Moreover, he says that:

> On the list among other things we try to interpret Marx in the context of Free Software. It's very interesting that much of what Marx said about the final development of capitalism can be seen in Free Software. In a sense, part of our work is trying to re-think Marx from a contemporary perspective, and interpret current capitalism as containing a germ form of a new society (Richardson, 2001:2).

In the interview made by Geert Lovink[42], the opinions of Stefan Merten, also the moderator of both mailing lists, clarifies the relation between the Free Software and the society, especially the one discussed in the context of the Oekonux Project. According to him, Free Software really has a big potential in the way to a different and especially new society, which will be far from the capitalist society and its concepts, such as labor, money, exchange and scarcity, etc. Marx is special figure in discussing this new society, since he saw a lot of things in the capitalist society. For Merten,

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39 Visit http://www.oekonux.org/introduction/index.html

40 For the statistics of number of messages sent to both German and English mailing lists, see Appendix A.

41 Computer scientist and software engineer.

42 Visit http://www.oekonux.org/list-en/archive/msg00029.html

> ...Marx created a very good and still very valid analysis of capitalism.
> Of course some of his thoughts must be brought into a contemporary
> perspective, but that doesn't make them worthless. However,
> rethinking Marx in the framework of the world is of today is something
> leftists of all currents seldom do (Lovink, 2001:2).

In the interview made by Joanne Richardson[43], Merten repeats his emphasis on Marx and his valid and comprehensive analysis of capitalism. He thinks that "The decline of the labor society we are all witnessing in various ways cannot be understood without that analysis" (Richardson, 2001:2). Therefore, in both lists, quotes from Marx, other links to Marx and various number of topics are used related with their discussions.

As Merten stressed, people who participate in the Oekonux Project have a common sense that Free Software might be exactly 'an early form of the new society embedded in the old society' (Lovink, 2001:3). Since they try to use new terms to discuss the old concepts, they use the German term 'GPL-Gesellschaft", which can be translated as 'GPL society', to name this early form of the new society they discuss in both mailing lists. According to the definition widely used in Oekonux, GPL society means 'a society based on the principles of production of Free Software'. Those principles are: (1) 'self-unfolding as the main motivation for production', (2) 'irrelevance of exchange value, so the focus is on the use value', (3) 'free cooperation between people', and (4) 'international teams' (Richardson, 2001:4). In fact, as Merten stresses, "...GPL Society would no longer need General Public License because there won't be any copyright. So at least at this time maybe it should be renamed" (Richardson, 2001:4) . According to Oekonux people, Free Software has features of a 'germ form'[44] which is a keyword to define a structurally new thing, which exists in the old. According to their historical assessment of the germ forms, they claim that Free Software as a germ form of a new society has become 'an important dimension of the development in the old form'. For them, the next steps will be the domination of this germ form and then 'restructuring of the overall process' in the society.

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43 Visit http://subsol.c3.hu/subsol_2/contributors0/mertentext.html

44 For the keyword 'Germ Form', visit http://www.oekonux.org/introduction/blotter/index.html

For the people of the Oekonux Project, GPL society refers to a society beyond capitalism. Since the most important goal of capitalism is to make profit, things should be scarce. Therefore everything should be commodified in order to be sold. According to Merten, the new problem in front of the capitalism is to make the information scarce, especially the digital one, which is difficult to keep by the invention of the Internet (Lovink, 2001). The reason behind all the debates about intellectual property rights, which make the digital information scarce and so a profitable good, is the reproducibility of the digital information with extremely low cost and without any loss (Lovink, 2001). On the other hand, Free Software prevents software from being scarce. "So, scarcity, which has always been a fundamental basis for capitalism, is not present in Free Software: Existing Free Software is available for next to zero price" (Richardson, 2001:3). Moreover, people of the new society will be self-organized, and also cooperated globally. Goods will be available to those who need them. In fact, the industrial model of production will be transformed into a new form of production by allowing human potential to flourish (Lovink, 2001). According to the argument of Merten, the only reason of the developers for developing Free Software is their own desire to develop high quality software instead of making profit (Richardson, 2001).

Merten claims that capitalism has been decaying (Richardson, 2001). The promise of capitalism to people for a better world stopped in the 1980s and it was left in the 1990s. According to him, "Maybe today for the first time in history we are able to overcome capitalism on the bases it has provided, by transcending it into a new society that is less harmful than the one we have" (Richardson, 2001:3). Although he accepts that there are many questions which can't be answered yet, Merten believes that Free Software will overcome the capitalism. In fact:

> Free Software is both inside and outside capitalism. On the one hand, the social basis for Free Software clearly would not exist without a flourishing capitalism. Only a flourishing capitalism can provide the opportunity to develop something that is not for exchange or for pure subsistence. On the other hand, Free Software is outside of capitalism for the reasons I mentioned above: absence of scarcity and self-unfolding instead of the alienation of labor in a command economy.

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> This kind of relationship between the old and the new system is typical for germ forms - for instance you can see it in the early stage of capitalist development, when feudalism was still strong (Richardson, 2001:3).

Consequently, these thoughts might seem more or less romantic and Utopian. However, the Oekonux Project has been living since 1999 and the community virtually formed at first in the realm of the project and continues to organize yearly conferences since 2001, to bring people together both from community and from different backgrounds. As Merten also stresses, Free Software by itself may not transform capitalism (Richardson, 2001). But, the principles of the production of Free Software, which have been seeded in capitalist system, and the people believing the power of this new production model may produce the effective solutions in the way of structuring a new society. And the Oekonux Project just mediates to understand the process of change in the existing society and may help to transform the existing structures of capitalism.

As stated before, the empirical part of this thesis is about the Oekonux Project, since it is assumed that the context of the project is quite appropriate for an understanding the FSM. In the following chapter, I attempt to analyze the FSM by assuming it as a form of the NSMs. The chapter presents quoted texts related with the critics of the list participants for capitalism and discussions about an alternative society. It argues them with reference to the theoretical framework of the study. Actually, the chapter presents remarkable discussions derived from the analysis of the mailing list [list-en@oekonux.org.](mailto:list-en@oekonux.org) Texts were quoted according to the themes that are critical to understand the FSM rather than considering the frequency of the concepts discussed. Briefly, my aim will be to give a descriptive account of the discussions in the list and try to point out to the agreements and/or disagreements of the contributers about the Free Software and social implications of it.

CHAPTER 4

A STRANGE KIND OF NEWNESS

> I have learned from my family's bitter radical past; if change occurs it happens on the ground, between persons speaking out of inner need, rather than through mass uprisings (Sennett, 1998:147).
>
> Richard SENNETT

4.1. The Critique of Capitalism

4.1.1. Scarcity

In the list, scarcity is discussed as a constructed thing rather than a natural cause. From this perspective, it is noted that,

> ...To make profits you need to have scarcity. For a good which is not scarce but is available in abundance it makes no sense to exchange it. Patents and other IPRs are ways to accomplish scarcity.[45]

On similar lines, it is also asserted that,

> ...Natural scarcity does not exist, because everything, what we have is produced. So richness and scarcity and the way we live is produced (this includes the inherently limited earth and its substances – but this is not my point here). This is my point: making things to be an "economic value" implies making them scarce. (...) The point is how to

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deal with scarcity? Software is always scarce (especially good one).[46]

Capitalism is the presupposition of scarcity. In other words, scarcity is the motor of the law of value. Scarcity of information is a product of capitalism rather than a basic fact of the order of the world. As Perelman (1998) argues, patents and copyrights are the innovations of the property based systems, like capitalism, to commodify human creativity and create artificial scarcities where there is no scarcity naturally. For Perelman (1998), creating scarcity allows people to economize on their scarce resources. On similar lines, as Bettig (1996) states, the patents and copyrights are the instruments of wealth that can be utilized for capital accumulation to generate more wealth. In the list, it is also stated that,

> ...software is never scarce, but the skills to create it and many of the associated products are, so naturally they have a price to their consumers.(...)
>
> Maybe I'm mad, but I've never really seen a contradiction between Free Software and natural market economics. The problems with software seem to be largely caused by the artificial restraints and the monopolistic positions it requires. I'm always slightly amazed that these activities are enshrined in most laws.[47]

Indeed, the concept of scarcity makes sense within the logic of the market economy. However, as Perelman (1998) states, the logic of scarcity, which is central to the market economy, is not applicaple to information. Unlike the other physical objects, information is nonrivalrous. Like the information, software is also nonrivalrous in nature and the scarcity of it is not possible. Software diffuses and escapes with codes. So, the efforts to make software scarce are all artifical restrains.

Actually, they are aware that information is not a scarce resource. The contradiction lies within the logic of market itself. On the one hand, the capitalist economy becomes increasingly dependent on information. On the other hand, intellectual property rights to control human creativity and restrictions to use information also increases. As mentioned in the quoted text above, the actual scarce resource is not

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46 Visit http://www.oekonux.org/list-en/archive/msg00042.html

47 Visit http://www.oekonux.org/list-en/archive/msg00041.html

the information or software, but the labor, which creates it. Because, new technologies and high quality information are created by the highly qualified knowledge or information workers.

4.1.2. Commodity, Exchange and Money

For the concept of commodity, it is stated that,

> IIRC "commodity" is defined as follows:
> - a good which is made by independent _private_ producers
> - the good has only a value if it is _exchanged_: no exchange, no value
>
> This means:
> - the value of the good appears as exchange value
> - "value" is comparison of amount of labor of exchanged products
> - not single products are compared, but a product with a "mean product"
> - "value" and "commodity" are notions of societal mean
> (...)
> In bourgois society you always and everywhere have laws. The special form of law and the form of commodity are constituents of bourgois society. Patent laws and copyright laws were not made for software![48]

According to the logic of the capitalist economy, scarcity is a precondition for creating an economic value and therefore making money. At the first step of this process, the product should be converted into a commodity, which is a pure element of exchange (Marx, 1971). This is how the logic of capitalist economy works. For Marx (1971), the exchange value of a commodity or a good has a separate material existence apart from the product. This separate existence is money, which is itself a commodity. The exchange value of the product therefore creates money. On similar line to Marx, it is argued that,

> * Exchange means that something is exchanged between two parties. I.e. both party get something.
>
> This delimits exchange from unidirectional flows such as we see in Free Software.

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48 Visit http://www.oekonux.org/list-en/archive/msg00481.html

Moreover this needs two separated parties to exist. When there are no separated parties there is no need to exchange. This delimits societies based on exchange - which need to have separated parties - from other societies - which need not have separated parties in the sense exchange based societies need them.

For material commodities this usually means that the giving party looses the commodity while giving. This is not true for information commodities and this is the basic reason you need artificial things like copyright stating what is obviously not factual.

* To make an exchange on a rational basis, there must be a common ground to base the exchange on.

Economists for long wondered what this common ground might be when looking at money / commodity exchange and I go along with Marx' analysis that it is the societal average amount of labor embodied in a commodity. This rather abstract thing is called (exchange) value and is reflected in the prices of a commodity. Money in this sense is only the concrete abstraction of value.[49]

Among the discussions, it is also noted,

I think it's especially important to note that capitalists *cannot* simply stop oppressing others, because the system does not allow them to, which also is an experience all of us can make on a daily basis: we know that through the things we buy, we support e.g. oppression of farmers and factory workers in third world countries, yet we *cannot* just stop doing so if we do not want to "drop out" completely.

I do think, though, that it makes some sense to say "money is the problem," because money *embodies* the machine (to me, at least). The exchange medium is an integral part of the capitalist system as we know it; if there were no money (or equivalent, which would boil down to be the same thing-- like money on the bank is still money, as is paper money, though both are abstractions over previous forms of money already)-- if there were no money, there would be no capitalist society, because direct trade works only on a much smaller scale. I have found that starting a discussion about the subject with the claims that "money is the problem" and "thus money should be abolished" is quite an effective way for getting the discussion in the right direction....[50]

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49 Visit http://www.oekonux.org/list-en/archive/msg00291.html

50 Visit http://www.oekonux.org/list-en/archive/msg00241.html

As stated by Marx (1971), in a capitalist economy, every production activity depends on the exchange value of commodified product. "...the product really becomes an exchange value, and exchange value becomes the direct object of production, the more must money relationships develop, ..." Marx (1971:60). As a result of this, 'the contradictions inherent in this money relationship, in the relation of the product to itself as money' develop.

4.1.3. Alienation

They discuss that the money and exchange relationships initiates the alienation. About alienation, it is stated that,

> It's not the money in itself - it's the exchange which is the problem. Labor for an exchange introduces the alienation and more and more ai come to the conclusion, that the alienation is the biggest problem - at least if it drives the society.

> So it's nothing gained if you abolish money but keep exchanging.... I tend to say, that any system of exchange would sooner or later end in a society like ours. In a sense we already have the best working society based on exchange.[51]

As Marx (1971) explains, the exchange relationship in the capitalist society becomes 'a force externally opposed to the producers, and independent of them'. In other words, exchange relationship becomes 'alien' to the producers. Thus, money and exchange relationships create some sort of alienation. For Marx (1971:60), as also stated in the text quoted above, it is impossible to abolish the implications and contradictions due to the money by just changing the form of money and to abolish money totally, so long as 'exchange value remains the social form of products'. On similar lines, it is also asserted that,

> The division of labor made it possible, that a person works only in part directly for hir own living and in part only indirectly for hir own living. Capitalism organized this process in a way, where people needed to be structural coerced to do this indirect work - wage labor. The reason for that seems to be, that the work needed in industry implied human

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51 Visit http://www.oekonux.org/list-en/archive/msg00271.html

> beings being just an add-on to the machine. Alienation at its best.
>
> This changed however dramatically over time. Today machines become more and more add-ons to human creativity. So the structural alienation inevitably embodied in the technical means available vanished.[52]

Indeed, it is argued that 'technological transformations of the labor process' have radically changed the workplace. Although the work is computerized, the blue-collar workers operating the computerized machines do not have 'any larger vision of different future, or knowledge about how to make change' (Sennett, 1998). "The work is no longer legible to them, in the sense of understanding what they are doing" (Sennett, 1998:68). So, this results in that workers no longer appears so much to be included within the production process; rather they come to relate more as watchman or regulator to the production process itself. In other words, human creativity or intelligence in using machines become dull when it is operational rather than self-critical, and workers operates like an add-on to the machine (Sennett, 1998). This creates some sort of alienation for the worker. However the process operates reversely for higher levels of technical work, that is, the use of computer or new technology in work increases the skill level of technical or white-collar workers and stimulated them to think. According the people who participate the Oekonux Project, Free Software is not based on exchange relationships and therefore overcomes the alienation. It increases the skill level of people and stimulates their creativity to think in a self-critical way.

4.2. Breaking The Limits of The System

4.2.1. General Public License (GPL)

As stated before, the greatest innovation of the Free Software Foundation is assumed as the General Public License (GPL), also known as Copyleft. Copyleft is used as a distribution method in order to protect developed software or any part of that software from being turned into proprietary software (Stallman, 1999). It

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52 Visit http://www.oekonux.org/list-en/archive/msg00372.html

intends to guarantee the users' freedom to run, copy, distribute, study, change and improve the software program. About the GPL, it is stated that,

> GPL fights scarcity, which indirectly hinders in making money with free software. Making money can be a side effect (beside others), but is not the main purpose why free software is developed. And this is the base on which the germ form of the new type of "developement of forces of production" (Produktivkraftentwicklung) grew.
>
> The GPL creates a niche inside the ocean of money-making logics which was filled by selbstentfaltung and self-organization.[53]

On similar lines, it is also emphasized,

> The GPL forces you to release the source to the people you give your derivative work to. They shall receive the same rights as you do. That does not imply you need to publish your work to the general public - not even to the people you have got the original source from. For a real *exchange* however, the people doing the original work need to get something back. This may be the case, but it doesn't need to.
>
> So I'd say, all the GPL enforces is a flow of source code bound to the flow of the software in any form. In FSF reading this means to enforce a flow of freedom.[54]

According to the most list participants, copyright agreements that prohibits the free sharing of information forces the individual into an adversarial relationship with others, and thus diminishes people. Useful thoughts are imprisoned by copyright. Unlike the standard copyright agreements, it is claimed that GPL or Copyleft guarantees freedom of any software program.

In contrast to the arguments and thoughts above, it is also argued that GPL applies a forced exchange in the case of derivative works. Actually, there is remark about GPL, that is,

> ...the GPL is an application of copyright law. Stallman emphasizes that point all the time. My own point is simply the obvious one that copyright law depends on state force, and that the GPL consequently

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53 Visit http://www.oekonux.org/list-en/archive/msg00245.html

54 Visit http://www.oekonux.org/list-en/archive/msg00370.html

does too. (...)

The enforceability of the GPL depends on being able to tell whether the code in question calls GPLed code. Back in the days when there were only procedural languages and static linking, and configuration management was simply a matter putting files in directories, that was fairly easy. Now it's not. In addition, the deployment of modern software systems is often dynamic, not static. The practical enforceability of the GPL is consequently much more difficult now than when it was first written.

...there's a difference between computers and humans. Computers don't practice law or preside over courtrooms, and humans don't resolve symbol tables. And humans don't have time to analyze the millions of lines of code in a typical enterprise software deployment as part of legal due diligence. I think these facts present a real problem for enforcing the GPL. We're talking about the real world here, and that means we have to consider practical questions like these in order to determine whether the enforcement model implied by the GPL is scalable.

...To me, the great thing about the GPL is NOT that it allows people or companies to get something for nothing as long as they don't release derivative works. If that's all the GPL can do, then it sucks. It's just exploitation. I think even a money-based economy would be more ethical than that.

Oekonux exists, of course, because we see a lot more potential in the GPL than simply that. In other words, we suspect that the GPL model might provide a way to structure society so that nobody is forced to do something they don't want to do, or that would demean them. That means the GPL will succeed only if it can encourage millions of people, not just a few, to offer freely the products of their diverse labor. Isn't that possibility what's really interesting about the GPL? If not, then we really ARE talking only about "free beer".[55]

Actually for Weber (2000:10), the problem with the nature of the GPL is 'the lack of flexibility inherent in the Free Software Foundation's unforgiving ideological stance'. In fact, this stance initiates alternative structure, which is known as Open Source Initiative for Free Software in the mid 1990s. According to Weber (2000), in contrast to the GPL, 'the Open Source Definition' does not restrict a programmer to make the modified software proprietary under new terms. However, it should be

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55 Visit http://www.oekonux.org/list-en/archive/msg00362.html

considered that the core idea of Free Software is more than open source. Unlike the Free Software, Open Source Definition allows developers 'to modify the software and release the modified version under new terms, that include making it proprietary' (Weber, 2000:10).

4.2.2. Gift Economy

In capitalism, everything is based on exchange value and money relationships. Actually, capitalist economy does not allow us to think outside the exchange relationships. However, together with the treatment of information as a commodity and private property, this money economy shifts to a different state. In the new state of the economy, the Internet is analyzed as a kind of 'gift' economy, since things can be freely produced, given and taken. In the list discussions, Barbrook states that,

> I originally started using 'gift economy' to describe the swapping of information on the Net because the Situationists appropriated this phrase from Marcel Mauss to describe their libertarian vision of communism. I thought that it was amusing to point out that the American military-industrial complex had funded the development of a form of mass communications which encouraged social behaviour celebrated by ultraleftist groups in the 1960s![56]

As stated before, he evaluates the new state of the economy as a kind of mixed and the hi-tech gift economy. However, the discussions in the list show that the 'gift economy' is a questionable concept. It is generally asserted that exchanging gifts is different from exchanging commodities. Nevertheless, in the list, gift economy is discussed with the connotations of the 'gift' in a capitalist society. On the one hand, it is asserted that,

> Free software development can be organized completely differently from capitalist work; it may be the kernel ('keimform') of a different mode of production. But we can only tell it may be one because it produces a product (free software) of general use; unlike, say, woodcarving for a hobby. The product is the guarantee of existence of the really important thing, the new way of working. But - free software is also produced by people working in the old way. Sun employees

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56 Visit http://www.oekonux.org/list-en/archive/msg00700.html

developing Tomcat, say, or even any firm which wants to look good and has some old unused proprietary software they can 'throw over the fence' unchanged, with a gpl stuck on it. So now we need to make a distinction - there is free software, which is copylefted, but produced in the old way, and 'doubly free software' ('doppelte freie software' (sp?)) which is free software produced in the new way. If I've got this right, it seems a very convoluted way of looking at it to me.

I think the gift economy idea simplifies this a bit without throwing anything basic out (maybe it could also add the beginnings of a theory of distribution to the theory of production):

A gift is something that can be passed on to others, something that can be given (if you keep it for yourself it stops being a gift). In the case of software, 'giving' implies also improving - I can't give you vi, because you can take that any time you want without my say-so. But I can give vi++, my new super-improved version. As a gift, you can take it, produce vi+++, and give that, and so on. Copyleft is a legal guarantee that once something has become a gift, it will stay a gift.

For gifts to circulate in this way requires the existence of a gift economy. This is just another name for the 'keimform' of people producing in the new way. It's inconceivable that IBM, Sun, and the other companies could continue producing free software without the people outside the business world producing free software in the new way - what would they do, trade it with one another? Now if my company chucks out some old software with the gpl on it, this is not a gift, because it cannot yet circulate. If it ever does circulate, it will be because someone thought it important enough to work on it, understand it, comment it, create a community around it - that's the point where it becomes a gift, not the point where someone attaches the gpl to it. It becomes a gift when it is absorbed into the new mode of production (you could say this is just a rewording of the 'doubly free' idea, but I think it's clearer because it's not a static label, it involves some human action)[57]

On the other hand, it is argued that,

So, Free Software (FS) is produced freely in a new way and distributed freely in a new way. I guess the latter part is quite clear: GPL + digital reproducability cancels bourgois proprietorship and Internet + digital reproducability revolutionises global distribution. We need a new name for the resulting exchange of goods indeed since it does not follow the hegemonial capitalist rules of exchange. Those are inextricably

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57 Visit http://www.oekonux.org/list-en/archive/msg00674.html

intertwined with private property (addressed by gpl) and scarcity (crushed by digital reproducability and the infrastructure provided by Internet and other ICTs). I agree that there are similarities to the exchange of presents. It is morally not accepted to sell a present. It really somewhat magically happens during the act of giving a present that it is kicked out of the otherwise allencompassing capitalist mode of exchange. The bad news: It is kicked out of every kind of exchange as it is not accepted morally to pass on a present as a present either. This was different at other times and at other places. Using the metaphor 'gift' nowadays we would have to stress this difference all over again. And the difference the GPL makes is not easily explained: "It's like a present, it's for free and you are not allowed to sell it. You can do everything with it, you are even allowed to pass it on as a present as long as you can make sure that the receiver does not sell it." That is quite a weird gift, isn't it? (...)

What I wanted to say is that we should be aware that 'gift-economy' remains a metaphor and that at certain points we maybe should get off the metaphor in order to understand what is going on. In the case of major companies adopting FS power games, alliances, and competition might explain more than the metaphor alone.[58]

In contrast to Barbrook, who sees open source software as a gift to anyone on the Net, and celebrates giving gifts as an integral part of this 'mixed economy'[59], Merten approaches the concept of gift and gift economy from a different perspective (Richardson, 2001). Contrary to the attempt to evaluate Free Software as a gift economy, he states that,

I don't like talking about gifts in Free Software or in terms of the Internet in general. There is no reciprocity in Free Software as, similarly, there is no reciprocity on the Internet. I have used thousands of web pages and millions of lines of code contained in Free Software without giving anything back. There simply is no reciprocity and even better: there is no need for reciprocity. You simply take what you need and you provide what you like. It's not by chance, that this reflects the old demand of "Everybody according to his/her needs".

Indeed there are several attempts, which are at best misleading, to understand the Internet and/or Free Software in terms of capitalist dogmas. The talk about "gift economies" is one of them, because it focuses on gifts as some sort of - non-capitalist but nonetheless -

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58 Visit http://www.oekonux.org/list-en/archive/msg00675.html

59 Visit http://www.oekonux.org/list-en/archive/msg00629.html

exchange. Even worse is the talk of an "attention economy" which defines attention as a kind of currency. The Internet, and especially Free Software are new phenomena which can't be understood adequately by using the familiar thought patterns of capitalism.[60]

As stated before, for Merten, the new/Internet/digital economy is just the 'plain old money economy on new territories' (Lovink, 2001:5). Like Merten, Terranova has also skeptical look at gift economy. There is overemphasis about the autonomy of the high-tech gift economy from capitalism. For her, "...the gift economy, as a part of the larger digital economy, is itself an important force within the reproduction of the labor force in late capitalism as a whole (Terranova, 2000:36).

4.2.3. Self-unfolding

'Self-unfolding', used for the meaning of the term 'Selbstentfaltung' in German, is widely discussed in the list. For the term, it is noted that,

> In the Oekonux discussion inspired by the principles of Free Software we say that in this way of production the self-unfolding / self-realization / freedom of each person is the prerequisite of the self-unfolding / self-realization / freedom of all.[61]

It is commonly emphasized that 'self-unfolding' has a meaning different from 'self-realization' or 'self-development'. Actually, it is asserted that,

> My self-realization means the restriction of the self-realization of others. If I get a job others don't. If I capture a market-share, others don't. And so on. This is not result of a personal defect, it is an effect of our economical and societal (social) structure. I can't go through life than this way. In short:
>
> **My assertion (get my way) neccessarily goes on costs of others.**
>
> On the contrary to this "Selbstentfaltung" – self-unfolding (self-development?) -- means a completely different thing: I only can come forward, can express myself, can be productive if others do the same for themselfs. More sharper:

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60 Visit http://www.oekonux.org/list-en/archive/msg00098.html

61 Visit http://www.oekonux.org/list-en/archive/msg00094.html

The self-unfolding of others is a precondition of my self-unfolding.

And vice versa. This normally is the structure in free software, because the main topic is to do what I want to do, because it's best for me --and at the same time: for others! (And btw: Oekonux itself is so productive and nice, because it works in this way). This only can emerge if a structure functions far away from scarcity and economic logics: Be better than others to replace them, beat them on market, ... and at least kill them physically. FS is such a self-unfolding (self-development) structure. (...)

If "self-development" sound yuppie-like as self realization in new economy, I would prefer a new unusual term e.g. self-unfolding. A new term can be a provocation to lead one to some good questions.[62]

The participants of the list are careful about not using the term 'self-unfolding' in a similar meaning with 'self-realization' or 'self-development'. It is frequently emphasized that "the self-unfolding of the individual is a prerequisite for the self-unfolding of all and vice versa". For the origins of this phrase, it is stated that,

Well, the root of this phrase is the old Marx (AFAIK it was by Marx) demand to build a society "where the freedom of the individual is the precondition of the freedom of all" ("die Freiheit des Einzelnen die Voraussetzung der Freiheit aller ist"). I always liked that phrase but it always stayed pretty abstract to me. Finally Oekonux filled that with content :-) . Once more it's striking BTW how much good old Marx understood :-).

Today in the Oekonux context we're replacing the "freedom" in the phrase above with Selbstentfaltung / self-unfolding and to me more and more it looks that the Selbstentfaltung / self-unfolding of the individual is as well a prerequisite for the Selbstentfaltung / self-unfolding of all as the other way around. At least both directions seem equally valid to me.[63]

However, for the reverse of the phrase, "the self-unfolding of others is a precondition of my self-unfolding", it is argued that,

Is this within the meaning of the word "Selbstentfaltung", or more of a

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62 Visit http://www.oekonux.org/list-en/archive/msg00144.html

63 Visit http://www.oekonux.org/list-en/archive/msg00173.html

claim or a logical deduction or implication? And how is that last statement (**) true? Seems like it would never happen if it was. Is something being lost in translation that would make that seem more sensical? Or maybe you mean something more like a mutual condition rather than strict precondition.[64]

For Marx, the development of an individual is determined by his/her direct or indirect associations with all the other individuals[65]. Only in a real community, the individuals have the means of cultivating his/her gifts in all directions, and therefore the personnel freedom is possible (Marx and Engels, 1970). According to Marx's argument, the individuals can obtain their freedom only in and through their direct or indirect connections in the community. If the 'freedom' is replaced with 'self-unfolding' as stated in the quoted text, it might be claimed that the self-unfolding of an individual is determined by the self-unfolding of all the others with whom he/she is directly or indirectly associative. In other words, the unfolding of an individual is a social context.

However, it might be claimed that the self-unfolding of all or a community, in which individuals have combined, always takes on an independent existence against each individual within this community. Therefore, the self-unfolding of all in a community will be different from the self-unfolding of the individuals who combine the community. On similar lines to this argument, it is stated that,

> Re "self-unfolding", Marx writes (in _The German Ideology_):
>
> *The semblance of community into which individuals previously united themselves always acquired its own independence over against these individuals; [...] In a real community individuals simultaneously achieve their freedom in and through their association.*
>
> Marx's sense of communism as not merely a sharing of the results of present production, but more crucialy of the accumulated production of previous generations (ie not just of products but of /means of production/) is partially realised in Free Software by the free availability of source code.[66]

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64 Visit http://www.oekonux.org/list-en/archive/msg00162.html

65 A Critique of the German Ideology, Abstract of Chapter 3,
   http://marxists.org/archive/marx/works/1845/german-ideology/ch03abs.htm

66 Visit http://www.oekonux.org/list-en/archive/msg00189.html

Briefly, there is a remarkable point for the discussions of self-unfolding. It should be considered that if 'the self-unfolding of an individual' includes 'the rights to the undisturbed enjoyment, within certain conditions of fortuity and chance'[67], the phrase will has a similar meaning with the self-development or personal freedom as been called in the definition of 'individual' in bourgeois ideology. Within this context, it is skeptically stated that,

> The 'selbst' in 'selbstentfaltung' is great as an emphasis on people doing things because they choose too, linking personal with social because the unfolding of the self is only possible in a social context. But in a sense it seems like wishful thinking: it works perfectly for free software, which people aren't physically dependent on. But what happens when the things we physically depend on are produced in this way too? (...)
>
> I guess what I'm saying is that I don't see any structural guarantee that 'selbstentfaltung' will be maintain itself; I would like to think that it would, but I'm afraid it might turn out to be a modern equivalent of 'liberte, egalite, fraternite': all deeply believed in, enough to motivate many people to support a revolution, but in the end more ideological than factual.[68]

Actually, self-unfolding may work perfectly for Free Software. However, it should be able to maintain itself for the things that are produced differently from Free Software. In other words, for an alternative society, everyone should have an interest for a maximum of people being able to self-unfold.

4.3. What Kind of A Social Movement?

With the emergence of new forms of collective actions in 60s, the meaning of social movements had to be re-conceptualized. As discussed before, these movements are called as NSMs, which are different from the conventional class-based social movements. The NSMs are usually motivated by cultural aims and organized around different issues. Although the FSM might be assumed as a form of the NSMs, it is quite different from the social movements of 60s. For the FSM as a

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67 The German Ideology

68 Visit http://www.oekonux.org/list-en/archive/msg00366.html

social movement, it is asserted that,

> The difference to the hippies is, that the Free Software developers unknowingly created a new way of production which in the end outperforms capitalist production. The hippies, however, have been "only" an idealist movement with next to no link to production and where they had links they have been to pre-capitalist models such as peasant and artisan societies.[69]

Indeed, this point of view perfectly reflects the difference of the FSM from other social movements. Actually, the major difference of the FSM is perhaps its attempt to discuss the capitalist mode of production and to propose so called a new mode of production in the information economy. However, the FSM is not a mass uprising and it continues to exist within the internetworked environment. In the list, it is also stated that,

> It seems clear to me, that if we are looking for a new society, we need to challenge virtually everything we know and to rethink it in the new context. The guiding principles in this project by definition are those of Free Software and it is amazing how often it is possible to draw conclusions from rethinking old concepts with Free Software in mind.[70]

Actually, the NSMs bear potential for the development of new concepts in existing social and political structure of society. In the list, the participants attempt to discuss the given codes and concepts of existing structure by developing and using new concepts. As Melucci (1994:102) states, "Conflicts are carried forward by temporary actors who bring to light the crucial dilemmas of a society". They inquire the definitions of codes and significance of the system. They attempt to give a different name to the world by using their own words. However, it is also asserted that,

> I doubt that this discussion list and its participants are generally anti-capitalist.
>
> Personally, I am irresulute whether capitalism is generally something

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69 Visit http://www.oekonux.org/list-en/archive/msg00056.html

70 Visit http://www.oekonux.org/list-en/archive/msg00273.html

good or bad. There are only two areas from which I definitively want it to fuck off:

1) Information: It is very terrible to see how in the last 100 years intellectual "property" rights have emerged, so that information could become a commodity.

Free software does a lot against that.

2) Basic Needs: It is a shame that in highly industrialized countries, people still have to sell their labor in order to get so basic things as food, clothes, housing, medical care and education.

Unfortunately, free software seems to have nothing to do with them. So, a solution for this problem may go far beyond the principles of free software developement...

The principles of free software developement will lead us to a certain form of society, but maybe not the optimal one. So, the question splits up into two:

a) Where will free software lead us to?

b) Will it be a step forwards towards my vision of an optimal society form?[71]

One of his mails, Merten stresses, "...my main concern is not to fight capitalism but to overcome it."[72] In fact, they are not really anti-capitalist. Actually, they do not locate themselves against capitalism, but attempt to imagine a new society based on the principles of Free Software.

4.4. Towards A New Society

As explained before, 'Oekonux' is the name of the project for the discussion about Free Software and its possible social implications including the possibility of a new society. As Merten stressed, people who participate in the Oekonux Project have a common sense that Free Software might be exactly 'an early form of the new society embedded in the old society' (Lovink, 2001).

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71 Visit http://www.oekonux.org/list-en/archive/msg00201.html

72 Visit http://www.oekonux.org/list-en/archive/msg00279.html

In one of his messages, Merten clarifies the Oekonux Project with these words: "...we're exploring the model of productive forces ("Produktivkraftmodell") of the next society universal selbstentfaltung being the basis of it". It is asserted that,

> How could we organize a society where the necessities of life are available for all – without the need for exchange. (That such a society must be based on the attainments of capitalism - especially the degree of automation – is another important point.)
>
> Free Software shows us one example where this is already happening: You simply take what you need and make available what you like.[73]

While explaining how Free Software can do this, he makes an analogy between the NGOs and Free Software because of their similarities. In the list, he notes,

> Actually I thought of NGOs such as Greenpeace or amnesty international which is at least based on the self-unfolding of their members. People supporting such organizations by their activity do that because they are convinced, that their activity is needed and may help this planet becoming a better place. Insofar such NGOs have some similarities with Free Software.
>
> * The motivation of the activists is similary part of their self-unfolding as it is for developers of Free Software.
>
> * At least the aim of such NGOs is as global as the need for a full featured software suite running on everything with a microprocessor.
>
> * Such NGOs work on an international basis with modern means as the Free Software developers do.
>
> * NGOs are at least not mainly interested in maximizing profit but instead strive for maximum "use value" - for instance by the prevention of destruction.
>
> * There are experts in the NGOs which have a deep knowledge of the area they are active in just as most Free Software developers are experts for software.
>
> So in some way NGOs of the type described above may build a germ form in their respective area.[74]

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73 Visit http://www.oekonux.org/list-en/archive/msg00306.html

74 Visit http://www.oekonux.org/list-en/archive/msg00114.html

According to him, Free Software, like NGOs he described above, might be a germ form for a new society. In the same message, he also emphasizes that "...every kind of (positive) next society would be a step above democracy"[75]. According to him,

> Representative democracy is indeed pretty interruptive for administration processes and when looking at the use of these processes that's not always a good idea.
>
> Well in democracies of our brand you need to interrupt the latest dictator you elected since you have no other chance to get things changed. But I think it would be far better if more people have a say in political processes so they don't need to be interrupted just to change their direction.
>
> And BTW: Working for getting voted again is as much an alienation as getting paid for this work.[76]

In the list, since the Oekonux people try to use new terms to discuss the concepts, they use the German term 'GPL-Gesellschaft", which can be translated as 'GPL society', to name this early form of the new society. In this new order, the means of production, technology, make self-unfolding possible. It is also claimed that the information and goods are freely available. In fact, it is argued that this new society will no longer a worker society. Since there is no labor, there will be no commodities, and then no exchange, no money and no alienation. As Merten stresses, "...GPL Society would no longer need General Public License because there won't be any copyright. So at least at this time maybe it should be renamed" (Richardson, 2001).

However, some questions, mixed and skeptical thoughts about the principles of Free Software and therefore the possibility towards a GPL Society are also stated. On the one hand, it is noted,

> ...I find the phrasing in the introduction to the list a bit awkward or a little off the mark. "principles of Gnu/Linux may serve as a foundation of a new society." That is, how can it be sufficient for a "foundation"? Do you mean something more like "a gateway to" or "key element of

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75 Visit http://www.oekonux.org/list-en/archive/msg00114.html

76 Visit http://www.oekonux.org/list-en/archive/msg00114.html

transformation and revolution" or "part of a foundation" or "points to a foundation"? It seems like when you are dealing with food, shelter, and the essentials certain "principles" of Free software development wouldn't necessarily match up or be sufficient to something which can't be duplicated without cost. Maybe it's useless nitpicking, but it just sounds weird to me.

What are all these "principles" exactly? Are they not simply a particular manifestation of something which came before? Such as anarchist morality - Free Association, Mutial Aid, etc.

What I think is interesting about GNU/FSF/GPL is how it manages to work within Capitalism. Generally, most ideas to transform society out of capitalism depend on total revolution. I don't have a lot of faith in all the companies trying to make a profit off Linux, capitalist success runs contrary to some of the principles here. But it doesn't matter, you can't stop it. They may depend on Linux, but Linux doesn't depend on them. There isn't really success/failure for Linux just degrees of popularity. The GPL, although I have had mixed feelings about it, lately it seems like a remarkably smart defensive move (until we outnumber them) to ensure Mutial Aid. How else can we apply these principles which ensure and encourage Mutial Aid, Free Association and Direct Action (in this case DIY)? It's manages to work against the alienation and exploitation of capitalism without requiring an entire social revolution. We can be hopeful, that it will bring about such transformation over time.[77]

On the other hand, as a response to message above, it noted,

These are basically the same questions I've had regarding what is still a very laudable attempt IMO to extend marxist theory into the 'Information Age'.

I agree that, no matter the theorizing over machines replacing people, or about some fabled 'new economy', the fact of the matter is: that world capitalism is *still* based primarily on *cheap factory labor* -- in factories, however, which are quickly being removed to the 'Third World' 'periphery' (even while becoming more computer-automated than ever before); and to the extent that commodities are produced *without* human intervention, the _old_ 'rules of the game' are being subverted (dialectically, of course) – and the capitalist machine comes that more 'off the rails' (immiserating effects on real people aside...)

However, I don't really believe we can say that the 'Linux phenomenon'

77 Visit http://www.oekonux.org/list-en/archive/msg00115.html

works 'within capitalism'. I believe that it would be more accurate to characterize this as 'existing in embryo within' the system – and representing some future alternate system which will be fully 'unfolded' upon 'maturation'.

This also begs the question of the likely _impossibility_ of changing the present system 'peacefully', by increment -- which is alluded-to above as an expression of the _present_ state of the phenomenon. ;>

AFAIC there is not much of a future to this GPL movement without its being tied to the general 'old-fashioned' need to transform society *at its base* -- and all recent attempts to decouple these have IMO revealed the anarchistic/libertarian/idealist base of this mode of thinking/ideology...

These don't even make sense to me logically -- you might as well talk about decoupling the phenomenon of entropy from the energy flows of the universe. It would remain nothing more than an interesting experiment (which the venture capitalists, of course, have tried to hijack for immediate gain) in this case.

But of course, AFAIC, the GNU/Free Software movement will not long remain a 'toy' to be played with; and I believe that it will indeed provide us some clues regarding how to organize production and other matters in our wished-for future society.[78]

As also stated the message just above, the FSM is about the new mode of production, which is different from the capitalist mode of production as stated by most of the Oekonux people. Although there is some sort of skeptical thoughts stated about the future of the movement, generally they believe it is based on human progress and self-unfolding.

In one of his interviews[79], Merten states that GPL society is a society beyond capitalism. As he describes, "...this society is no longer based on exchange and exchange value and thus the term labor doesn't make much sense any longer". Instead, GPL society will be based on the principles of production of Free Software which are: (1) 'self-unfolding as the main motivation for production', (2) 'irrelevance of exchange value, so the focus is on the use value', (3) 'free cooperation between

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78 Visit http://www.oekonux.org/list-en/archive/msg00127.html

79 Visit http://www.oekonux.org/list-en/archive/msg00029.html

people', and (4) 'international teams' (Richardson, 2001).

According to Oekonux people, Free Software has features of a 'germ form' which is a keyword to define a structurally new thing, which exists in the old. According to their historical assessment of the germ forms, they claim that Free Software as a germ form of a new society has became 'an important dimension of the development in the old form'. About germ form theory, which is Keimform in German, and also as a response to the message just above, Merten notes,

> * Step 1: Nascency of the germ form which unfolds later.
>
> I chose "nascency" for "Entstehung" because this points to the fact, that the germ form is not "made" anyhow. Free Software has not been created as a germ form - though it is.
>
> * Step 2: Changes in the general conditions in the old dominant over-all process (crisis).
>
> This is what we're experiencing currently with capitalism. I think it started somewhere in the 1970s. The German Krisis group [www.krisis.org] has analyzed that very well.
>
> * Step 3: Change of the former unimportant germ form to an important dimension of development besides the form still ruling the over-all process (first qualitative leap).
>
> I guess that is where we are in the software sector. This is not the case in other sectors.
>
> * Step 4: The new dimension of development becomes dominant and starts to rule the over-all process (second qualitative leap).
>
> This is what I guess is happening during the next few years in the software sector. In some fields it's already taking place.
>
> * Step 5: Restructuring of the over-all process according to the requirements of the new dominant dimension of development.
>
> This is the point after the revolution (where BTW so many revolutions of the last century failed miserably :-(...)[80]

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80 Visit http://www.oekonux.org/list-en/archive/msg00139.html

For Merten and the Oekonux people, who thinks similar with him, currently Free Software as a germ form has already started to be important dimension of development besides the current form of development, although it has not been ruling the over-all process yet.

CHAPTER 5

CONCLUSION

It might be claimed that the best social theorists of the information age are science fiction writers. In the foreword of his book, Brave New World, Huxley (1969) states that he offers only two marginal alternatives to the Savage. One is the life in Utopia, which seems highly technological, but insane. The other is the life in primitive Indian village, which seems relatively more human, but queer. However, he adds that if he were rewrite his book, he would offer the Savage a third alternative. For this third alternative, he asserts that,

> Between the utopian and the primitive horns of his dilemma would lie the possibility of sanity – a possibility already actualized, to some extent, in a community of exiles and refuges from the Brave New World, living within the borders of the Reservation. In this community economics would be decentralist and Henry-Georgian, politics Kropotkinesque co-operative. Science and technology would be used as though, like the Sabbath, they had been made for man, not (as at present and still more so in the Brave New World) as though man were to be adapted and enslaved to them. Religion would be the conscious and intelligent pursuit of man's Final End, the unitive knowledge of the immanent Tao and Logos, the transcendent Godhead or Brahman. And the prevailing philosophy of life would be a kind of Higher Utilitarianism, in which the Greatest Happiness principle would be secondary to the Final End principle- the first question to be asked and answered in every contingency of life being: "How will this thought or action contribute to, or interfere with, the achievement, by me and the greatest possible number of other individuals, of man's Final End? (Huxley, 1969).

Actually, it seems that the future of the high information society will be very close to the Utopia version of the Huxley's imagination. Brave New World has not realized yet. But Free Software community and its participants that are subjected to this thesis already have been discussing to find a third alternative apart from those

two marginal ones.

As stated before, this study assumes that the FSM is a form of the NSMs. Unlike anti-capitalist social conflicts of workers' movement, the FSM is kind of new non-institutionalized collective action, which realize in a social and internetworked environment. However, it is also different from the social movements of 60s and 70s, that were usually motivated by cultural aims and organized around different issues. Actually, the major difference of the FSM is its attempt to discuss the capitalist mode of production and to propose a new mode of production in the information economy. In other words, the most important feature of the FSM, which makes the movement peculiar, is its power to bring people from all over the world successfully together for producing a product, Free Software, and its antagonism with the capitalist mode of production together with its relationships based on exchange. The FSM points the basic inconsistency within the existing information economy. Scarcity of information is not possible, information is diffused, escapes with codes. If the power of the capitalism comes from the mode of production, material or immaterial, the principles of the Free Software production are directly related with this production process.

The collective identity within the movement is shaped through the discussions or collectivities with people coming from different background. As it is seen from the discussions of the Oekonux Project, the FSM seems to have 'an antagonistic nucleus'. The participants and advocates of the FSM have an endeavor to give different words for the old concepts that they antagonize. They emphasize to rethink the old concepts within the context of the Free Software. In fact, they use the old terms to fill the meaning into the new words. In this antagonism, the activists in the Oekonux discussion list attempt to give a different name to the world by developing a new language that replace with the words used by the social order to organize our daily experience. Unlike the conventional class-based social movements, that were mostly associated with the idea of revolution, the FSM is associated with the idea of democracy. Actually, both the RM and the NSMs perspectives are not sufficient by themselves to be able to explain the FSM. So the there is a need for a new

theoretical perspective to analyze the FSM. The FSM is a new form of collective action and social movement that should be analyzed with its economical, political and cultural dimensions.

As stressed by Wallerstein (1999:3), "...in human social systems, the most complex systems in the universe, therefore the hardest to analyze, the struggle for the good society is a continuing one". In seeking alternatives to existing social order and imagining a good society, 'utopian' and 'critical' approaches are two different but related discourses of social transformation towards present conditions (Burwell, 1997). Utopian discourse expresses a social order, which is radically different from the present one, and imagines a qualitative break with the existing conditions. In fact, utopian imagination leaves the existing structure and imagines a place, which really does not exist[81]. On the other hand, critical discourse commonly focuses on the existing conditions and expresses the contradictions of present social order by disrupting society's claim to unity and legitimacy.

The Free Software community is composed of freely co-operating individuals, who are seeking this so called good society. Instead of running from the new political economy, they try to find a passage to an alternative form of society. They attempt to show how long run purposes be pursued in such a short and uncertain society. Actually, the people developing Free Software and advocating its principles for a new mode of production and then a social transformation have opportunities with their high technological skills to resist the existing system. Therefore, the proposals of the FSM and Free Software community for an alternative society are critical. Actually, Merten states that,

> I hope these more or less utopian thoughts give an idea of the notion of a GPL Society as it is currently discussed within the Oekonux project. It's not Free Software in itself which may transform capitalism. Instead, the principles of the production of Free Software - which have developed within capitalism! - provide a more effective way of production on the one hand and more freedom on the other. The main question is how is it possible to translate these principles to other areas.

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81 "Utopia is nowhere (outopia) and it is also somewhere good (eutopia). To live in a world that can not be but where one fervently wishes to be: that is the literal essence of utopia." (Kumar, 1991:1)

68

I tried to explain how Free Software - as a germ form of the GPL society - is inside as well as outside of capitalism. I think Free Software is only the most visible of the new forms which together have the potential to lead us into a different society. Capitalism has developed the means of production to such an extent that people can use them for something new. Of course, the transformation also requires a political process and although historically the preconditions now are better than ever before there is no automatic step that will lead to the GPL society. People have to want this process. However, I'm quite optimistic that they will, because Free Software shows us, in microcosm, how a better life would look, so the GPL Society is in the best interest of people. And Oekonux is there to understand the process of this change, and perhaps at some point our thoughts may help to push the development forward :-) (Richardson, 2001).

In imagining alternatives to our present social order, the approach of the participants to the Oekonux Project seems 'critical' rather than 'utopian'. They express the contradictions of the present social order rather than imagining a qualitative and radical break with the existing conditions. In other words, their imagination for a new society is not a pure utopian science fiction, but critical analysis of today's global capitalism. However, their language includes new terms. They inquire the definitions of codes and significance of the logic of capitalism. Although they envision a radical and qualitative break with our present social order, they do not abandon their critical connection to contemporary conditions. Therefore, their proposals do not fail to present an accessible alternative.

Sennett (1998:148) says that "...if change occurs it happens on the ground, between persons speaking out of inner need, rather than through mass uprisings." And by referring to the 'New Capitalism', he continues that "...a regime which provides human beings no deep reasons to care about one other cannot long preserve its legitimacy." Actually, Free Software community contains a kind of sharing required to resist the new capitalism and political economy. It seems that the actors of the FSM achieve fulfillment through work and find in their own brain, unalienated means of production. They do not have some specific ideal form of society in their mind. In fact, their imagination is about a society, in which human intellectual creativity is in its general flourishing state, instead of plentiful material

consumptions. Actually, Free Software collectivity seems to function as a channel through which human intelligence continuously renews its capacity to produce.

For some, foretellings of Marx about the future of capitalism have collapsed and the Soviet Union failed. Indeed, capitalism is still the dominant institutional and economical organization in our socities. Nevertheless, as also Lyon (1988) stresses, "struggles will go on, in the hope of helping direct social change" and in providing challenges to the existing structures, new social movements are appearing. The FSM is one of them. Although the actors of the movement may not create a transformation in the current society and its structures, they may stimulate us towards alternative forms of social order. Free Software/Open Source projects demonstrates empirically that a large, complex system of code can be built, maintained, developed, and extended in a non-proprietary setting where many developers work in an highly parallel, relatively unstructured way and without direct monetary compensation. Although it seems difficult to see the FSM as a substantial threat to the advanced capitalist societies, its success will initiate parallel changes on other activites to jump into other fields of production both inside and outside of IT and collect similar force within society. If this comes to, we have a chance to renew the existing conditions of present social order towards an alternative world.

The basic interest of this thesis was to argue whether the information technologies and their technological apparatuses have the power to breach in the current capitalist system and therefore to lead us into a transformation towards an alternative world. Actually, this study more specifically attempted to argue and make sense out of this argument on the basis of an analysis of the Free Software Movement (FSM) with its suggestions for such a transformation towards a new society. Certainly, it should be stated that the study is not complete. Alternatives of capitalism should be able to satisfy some critical neccessities like productivity, participative democracy, sustainable development, solidarity and sharing. Although this study attempted to present the suggestions of the FSM for a new world construction, the imagination of a good society with these neccessities and the concept of Free Software as a seed for a possible social change across the world are still critical to discuss.

BIBLIOGRAPHY

Aronowitz S and DiFazio W. 1994. The Jobless Future: Sci-Tech and the Dogma of Work. University of Minnesota Press, Minneapolis, London.

Barbrook R. 1998. The Hi-Tech Gift Economy. First Monday, volume 3, number 12. <http://firstmonday.org/issues/issue3_12/barbrook/index.html>.

Bettig RV. 1996. Copyrighting Culture: The Political Economy of Intellectual Property. WestviewPress.

Bey H. 2002. T.A.Z Geçici Otonom Bölgeler. Stüdyo İmge Yeni Seri:14, Siyaset Dizisi:2, Birimci Basım.

Boyle J. 1996. Shamans, Software, and Spleens: Law and the Construction of the Information Society. Harvard University Press, Cambridge, Massachusetts, London, England.

Burk D. L.. 2001. Copyrightable Functions and Patentable Speech. Communications of the ACM, Vol. 44, No. 2, February.

Burwell J. 1997. Notes on Nowhere: Feminism, Utopian Logic, and Social Transformation. American Culture, Volume 13. University of Minnesota Press, Minneapolis, London.

Castells M. 1991. The informational city: information technology, economic restructuring. Basil Blackwell: Oxford.

Çayır K. 1999. Yeni Sosyal Hareketler: teorik açılımlar. Kaknüs Yayınları.

Cleaver H. 1999. Computer-linked Social Movements and the Global Threat to Capitalism. Austin, Texas. <http://www.cseweb.org.uk/downloads/cleaver.pdf>.

Della Porta D, Diani M. 1999. Social Movements: An Introduction. Blackwell Publishers.

Dyer-Witheford N. 1999. Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism. . <http://www.fims.uwo.ca/people/faculty/dyerwitheford/index.htm>.

Hamilton M, Hirszowicz M. 1989. Class and Inequality, chp 1. St. Martin's Press.

Hirsch J. 1988. The Crisis of Fordism, Transformations of the "Keynesian" Security State, and New Social Movements. JAI Press Inc. Volume 10: 43-55.

Huxley A. 1969. Brave New World. Perennial Classic, Harper & Row, Publishers, Inc., New York.

Johnston H. 2002. Verification and Proof in Frame and Discourse Analysis in Klandermans B and Staggenborg S, Methods of Social Movement Research. University of Minnesota Press.

Kumar K. 1991. Utopianism. University of Minnesota Press, Minneapolis.

Kumar K. 1995. From Post-Industrial to Post-Modern Society: New Theories of the Comtemporary World. Blackwell.

Lovink G. 2001. Interview with Stefan Merten. . <http://www.oekonux.org/list-en/archive/msg00029.html>.

Lyon D. 1988. The Information Society: Issues and Illusions. Polity Press.

Mamay S. 1991. Theories of Social Movements and Their Current Development In Soviet Society in Jerry Eades and Caroline Schwaller (eds.), Transitional Agendas: Working papers from the Summer School for Soviet Sociologists. The Center for Social Anthropology and Computing, University of Kent . <http://lucy.ukc.ac.uk/csacpub/russian/mamay.html>.

Marx K. 1971. The Grundrisse, Edited and translated by David McLellan. Harper & Row, Publishers.

Marx K. 1973. Grundrisse, tr. by M. Nicolaus. Penguin Books.

Marx K and Engels F. 1970. The German Ideology, Part One with selections from Parts Two and There, together with Marx's "Introduction to a Critique of Political Economy". Lawrance & Wishart, London.

Melucci A. 1985. "Çağdaş Hareketlerin Sembolik Meydan Okuması" in Kenan Çayır, Yeni Sosyal Hareketler: teorik açılımlar. Kaknüs Yayınları.

Melucci A. 1994. "A Strange Kind of Newness: What's 'New' in New Social Movements?" in Larana E, Johnston H and Gusfield J, New Social Movements: From Ideology to Identity. Temple University Press, Philadelphia.

Moglen E. 1999. Anarchism Triumphant: Free Software and the Death of Copyright. First Monday, volume 4, number 8, August. <http://old.law.columbia.edu/my_pubs/anarchism.html>.

Offe C. 1985. "Yeni Sosyal Hareketler:Kurumsal Politikanın Sınırlarının Zorlanması" in Kenan Çayır, Yeni Sosyal Hareketler: teorik açılımlar. Kaknüs Yayınları.

Perelman M. 1991. Information, Social Relations and the Economics of High Technology. St. Martin's Press, New York.

Perelman M. 1998. Class Warfare In The Information Age. St. Martin's Press.

Plotke D. 1995. What's So New About New Social Movements? in Social Movements: Critiques, Concepts, Case-Studies, Edited by Stanford M. Lyman. Macmillan.

Richardson J. 2001. FREE SOFTWARE & GPL SOCIETY, Interview with Stefan Merten of Oekonux. . <http://subsol.c3.hu/subsol_2/contributors0/mertentext.html>.

Schiller D. 1997. The Information Commodity: A Preliminary View in CUTTING EDGE Technology, Information Capitalism and Social Revolution, Edited by Jim Davis, Thomas A Hirschl and Michael Stack. Verso, London New York.

Sennett R. 1998. The Corrosion of Character: The Personel Consequences of Work in the New Capitalism. W.W. Norton & Company, New York, London.

Söderberg J. 2002. Copyleft vs. Copyright: A Marxist critique. First Monday, volume 7, number 3 (March) . <http://firstmonday.org/issues/issue7_3/soderberg/index.html>.

Stallman R. 1999. The GNU Operating System and the Free Software Movement in Chris DiBona, Sam Ockman and Mark Stone (editors), Open Sources: Voices from the Open Source Revolution. O'REILLY Online Catalog. <http://www.oreilly.com/catalog/opensources/book/toc.html>.

Stallman R, Garfinkel S and Kapor M. 1991. Why Patents Are Bad for Software. Issues in Science and Technology. <http://lpf.ai.mit.edu/Links/prep.ai.mit.edu/issues.article>.

Terranova T. 2000. Free Labor Producing Culture For the Digital Economy. Social Text 63, Vol.18, No. 2, Summer. Duke University Press.

Tilly C. 1978. From Mobilization to Revolution. Random House, New York.

Touraine A. 1988. "Toplumdan Toplumsal Harekete" in Kenan Çayır, Yeni Sosyal Hareketler: teorik açılımlar. Kaknüs Yayınları.

Touraine A. 1992. "Beyond Social Movements" in Stanford M. Lyman, eds., Social Movements: Critiques, Concepts, Case-Studies. Macmillan Press.

Wallerstein I. 1999. The End of the World As We Know It, Social Science for the Twenty-First Century. University of Minnesota Press, Minneapolis.

Weber S. 2000. The Political Economy of Open Source Software. BRIE Workin Paper 140, E-conomy Project Working Paper 15. <http://repositories.cdlib.org/brie/BRIEWP140/>.

Weber S. 2000. The Political Economy of Open Source Software. BRIE Workin Paper 140, E-conomy Project Working Paper 15. <http://repositories.cdlib.org/brie/BRIEWP140/>.

Zald MN, McCarthy JD. 1987a. "Resource Mobilization and Social Movements: A Partial Theory" in Social Movements in an Organizational Society: Collected Essays. Transaction Publishers.

Zald MN, McCarthy JD. 1987b. "The Trend of Social Movements in America: Professionalization and Resource Mobilization" in Social Movements in an Organizational Society: collected essays. Transaction Publishers.

APPENDICES
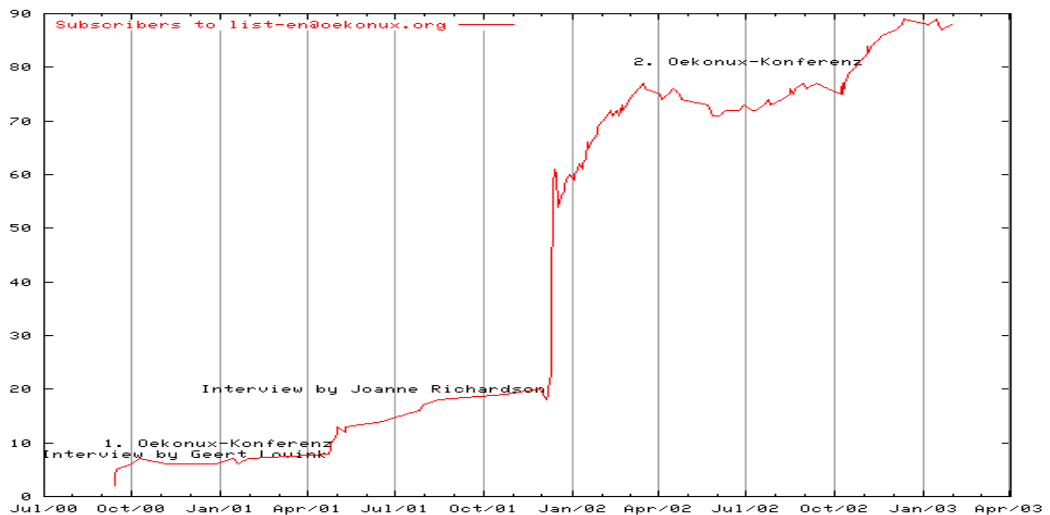
A. STATISTICS OF THE OEKONUX MAILING LIST

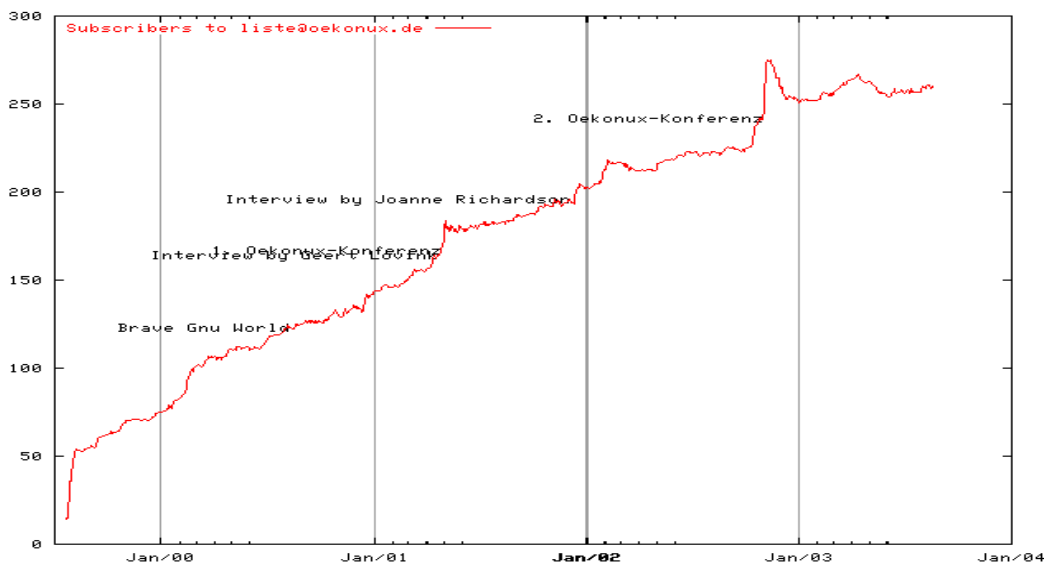Figure A1: Development of Number of Subscribers to list-en@oekonux.org[82]

Figure A2: Development of Number of Subscribers to liste@oekonux.de[83]

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82 See http://www.oekonux.de/projekt/statistik/list-en/index.html

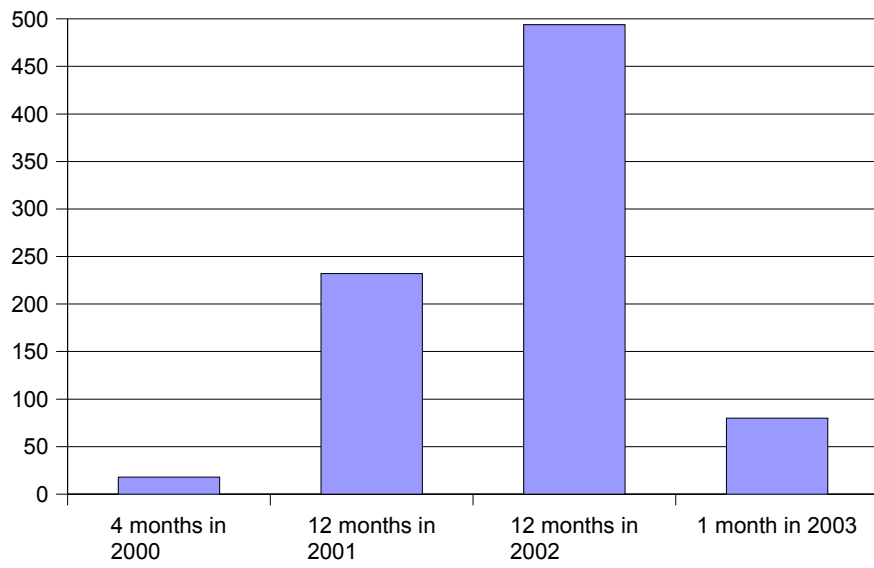83 See http://www.oekonux.de/projekt/statistik/liste/index.html

Figure A3: Number of Messages Sent to list-en@oekonux.org, between the 13 September 2000 and 20 January 2003.

B. MAIN THEMES OF MESSAGES IN THE OEKONUX MAILING LIST

Main Theme	Message Numbers
A Toolkit for Customer Innovation	msg00487
Absorption of Free Software By Capitalism	msg00564
Alienation	msg00056, msg00098, msg00271, msg00372, msg00554
Alliance of Labor Unions and Open-Source Movement	msg00328
Altruism	msg00368
Anarchism	msg00168, msg00214, msg00629
Anti-Free Software Case of Microsoft	msg00453
Aspects of Oekonux List	msg00133
Automation	msg00372
Ayn Rand	msg00436, msg00437
Being Gratis	msg00787, msg00795, msg00805, msg00806, msg00807
Big Infrastructures Under The Control of Capitalism	msg00290
Book on Hacking-Copyright-Marxism	msg00620
Boundaries of Free Software	msg00302
Bourgois Individual	msg00192
Breaking the Limits of the System	msg00115, msg00125, msg00127, msg00168, msg00170, msg00263, msg00675, msg00676, msg00807
Capitalism	msg00139, msg00164, msg00192, msg00200, msg00209, msg00212, msg00224, msg00241, msg00394, msg00396, msg00429, msg00790, msg00793

Main Theme	Message Numbers
Collective Consciousness	msg00111, msg00114, msg00161, msg00207
Collective Labor	msg00700
Commodity	msg00481, msg00482, msg00502, msg00521
Competition	msg00226
Context of Oekonux Project	msg00013, msg00029, msg00030, msg00040, msg00094, msg00098, msg00138, msg00139, msg00231, msg00290, msg00319, msg00320, msg00344, msg00361, msg00394, msg00431, msg00620, msg00778, msg00782, msg00801
Cooperation	msg00226
Copyleft/GPL	msg00035, msg00060, msg00064, msg00164, msg00227, msg00245, msg00263, msg00298, msg00299, msg00302, msg00317, msg00323, msg00360, msg00362, msg00365, msg00370, msg00674, msg00675, msg00676, msg00677
Criticism of Empire (Negri)	msg00339, msg00353, msg00355
Debian As An Anarchist Organization/Project	msg00687, msg00692
Decay of Capitalism	msg00029, msg00098, msg00371
Democracy	msg00103, msg00107, msg00114, msg00148, msg00208, msg00215, msg00221
Demography of Open Source/Free Software Developers	msg00593, msg00614
Developing Individual Life Model	msg00351
Development/Production Costs	msg00555, msg00557
Digital Reproducability	msg00676, msg00783
Double Free Software	msg00782
Egoistic/Altruistic Form of Thinking	msg00259, msg00276

Main Theme	Message Numbers
Exchange	msg00224, msg00228, msg00271, msg00279, msg00280, msg00291, msg00293, msg00294, msg00295, msg00296, msg00300
Exchange Value	msg00098
Exploitation of Free Software	msg00029, msg00167, msg00404, msg00543
F-CPU Project	msg00090, msg00412, msg00597
FLOSS Movement	msg00815
Free Book	msg00514
Free Energy	msg00248
Free Hardware Design	msg00070
Free Hardware Movement	msg00066
Free Microsoft Software/Free Software	msg00559
Free Production	msg00029, msg00098, msg00201
Free Radio Linux	msg00330
Free Software As A Gift	msg00674
Free Software As A New Model	msg00290
Free Software Development/State	msg00434
Free Software Ideology	msg00104, msg00114, msg00148, msg00212, msg00438, msg00439
Free Software in Context of Unions	msg00480
Free Software Movement	msg00370, msg00436, msg00439
Free Software Movement in China	msg00072
Freedom	msg00556
Freedom/Determinism	msg00250, msg00297
Geek Culture (In Terms of Class Differences)	msg00593
Genome Liberation	msg00409

Main Theme	Message Numbers
Gift	msg00646, msg00647, msg00649, msg00651, msg00673, msg00674, msg00675, msg00676, msg00700, msg00701
Gift Economy	msg00098, msg00673, msg00675, msg00676, msg00700, msg00701
Gift-Based Societies	msg00647
Globalization	msg00806
Globalization/Nation-State	msg00355, msg00374
GNU Manifesto	msg00005, msg00008
GNU Threat to Microsoft	msg00793
GNU/Marxism Perspective	msg00620, msg00627, msg00630, msg00633, msg00639, msg00642, msg00648
High-Tech Gift Economy	msg00616, msg00629
Idea Behind Free Software Development	msg00279, msg00306, msg00319, msg00368, msg00615
Innovation by User-Communities	msg00093
Intellectual Property	msg00037, msg00040, msg00048, msg00200, msg00329, msg00452, msg00805, msg00820
Involvement to Decision Making	msg00221
Is Free Software Anti-Capitalist?	msg00779, msg00790
IT Companies Supporting Free Software/Hardware	msg00675, msg00676
Legal Positivism	msg00354, msg00355
LETS System	msg00263, msg00268, msg00275, msg00277, msg00278, msg00279, msg00282, msg00283, msg00284, msg00290, msg00358
Liberation Software Instead of Free Software	msg00159, msg00163, msg00168

Main Theme	Message Numbers
Libertarians	msg00168, msg00436, msg00437, msg00438, msg00793, msg00794, msg00806
Libre Software Engineering	msg00750
Lindows	msg00542, msg00543
Natural Law Thinking	msg00353, msg00354, msg00355, msg00376
New Language As A Must	msg00273, msg00675, msg00782
New Phase in Operating Systems	msg00398
New Society	msg00013, msg00029, msg00098, msg00114, msg00115, msg00125, msg00127, msg00139, msg00164, msg00168, msg00170, msg00174, msg00186, msg00189, msg00190, msg00193, msg00200, msg00201, msg00206, msg00208, msg00209, msg00212, msg00217, msg00218, msg00220, msg00221, msg00224, msg00226, msg00228, msg00229, msg00273, msg00293, msg00297, msg00301, msg00306, msg00307, msg00308, msg00315, msg00316, msg00320, msg00324, msg00370, msg00393, msg00394, msg00511, msg00527, msg00615
Non-Governmental Organizations	msg00114
Making Money with Free Software	msg00034, msg00035, msg00039, msg00050, msg00056, msg00064, msg00075, msg00097
Material-Immaterial Product	msg00200, msg00533, msg00554, msg00609
Microsoft Attacking the GPL	msg00073, msg00074, msg00075, msg00076, msg00085
Microsoft Lobby Against Peruvian Free Software Bill	msg00569, msg00576
Mini-Plants in Mobile Containers	msg00458

Main Theme	Message Numbers
Money	msg00241, msg00271, msg00279, msg00300, msg00315
Motivations To Write Free Software	msg00332
Misc	msg00309
Oekonux Book Project	msg00758, msg00803
Oekonux Conference 2002	msg00548, msg00686
Open Government	msg00103, msg00107
Open Money System (Community Money)	msg00314, msg00315, msg00316, msg00320, msg00322, msg00358
Open Project	msg00103, msg00107, msg00126
Open Source Solutions (Announcement)	msg00490
Open Standards	msg00492, msg00494, msg00495, msg00498, msg00501, msg00505
OpenCola	msg00329
OpenEncyclopedias	msg00329
OpenLaw	msg00329
OpenMusic	msg00329
Open-Source	msg00393, msg00409
Open-Source Movement	msg00329
Open-Source Software	msg00093, msg00329
Owning The Means of Production	msg00554
Participatory Economics (Parecon)	msg00416, msg00418, msg00419, msg00433
Patents	msg00421, msg00437, msg00494, msg00495, msg00498, msg00499, msg00501
Peer to Peer Way of Producing Knowledge	msg00565, msg00577
Peruvian Free Software Bill	msg00472, msg00473, msg00474
Philosophical Values of Free Software	msg00052, msg00058

Main Theme	Message Numbers
Political Economy of Free Software	msg00304
Positive Intellectual Rights	msg00455, msg00456, msg0057, msg00466
Possession	msg00554, msg00556
Power	msg00148
Principles of Free Software	msg00029
Privatization	msg00278, msg00290
Problems With Opinions of Bill Gates on Free Software/GPL/Open Source	msg00462, msg00463
Property	msg00521, msg00554, msg00556
Property Software vs. Free Software	msg00560, msg00695, msg00696
Questionnaire On Free Software/Open Source	msg00408
Radicalism	msg00351
Reclaim The Streets	msg00669
Refutation of Germ Form Arguments	msg00264
Reputation	msg00321
Revolution	msg00115, msg00139, msg00168, msg00207
Scarcity	msg00035, msg00041, msg00042, msg00048, msg00050, msg00075, msg00097, msg00098, msg00281

Main Theme	Message Numbers
Self-Unfolding	msg00094, msg00098, msg00118, msg00141, msg00143, msg00144, msg00146, msg00147, msg00149, msg00150, msg00152, msg00158, msg00160, msg00161, msg00162, msg00170, msg00173, msg00189, msg00191, msg00192, msg00197, msg00200, msg00209, msg00212, msg00214, msg00219, msg00220, msg00222, msg00229, msg00230, msg00237, msg00242, msg00245, msg00253, msg00258, msg00259, msg00261, msg00272, msg00276, msg00285, msg00298, msg00305, msg00308, msg00346, msg00359, msg00366, msg00371, msg00372, msg00373, msg00377, msg00379, msg00380, msg00382, msg00386, msg00387, msg00394, msg00396, msg00428, msg00554
Self-Unfolding in Educational System	msg00232, msg00234, msg00249
Self-Volarisation	msg00371, msg00394
Social Change Through Self-Unfolding	msg00098
Social Intelligence	msg00711, msg00717
Societalization	msg00394, msg00396
Software Business Models	msg00465
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