Free Software

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1   Introduction

> "Civilization has reached every part of the world and the North has realised it cannot conquer by restricting access to factors of production through waging war; the best method to maintain the status quo is by denying the South access to the most important factor which without it all others are derailed; this factor is information. Thus they have introduced the concept of International Copyright Law." World Social Forum, Nairobi, Wakasa and Gitau (2007)

As a young hacker, computer programmer at MIT Artificial Intelligence Lab, Richard Stallman fixed annoying problems with the donated printer. When he requested source code for the printer, which was a common practice at the time, his request was refused (Williams, 2002: 4-12). What was until then common, and what hackers believed served progress in the quality of science and engineering – sharing of software code – was closed down, enclosed by the company that developed it. Free Software (Stallman, 2002: 41) was born out of refusal of a single man to submit to the logic of enclosure of wealth in the intellectual sphere. The set of principles Richard Stallman stood for ended up embodied in the General Public Licence (p.195). The body of intellectual wealth released under such licence has been in expansion since. Vast majority of all the existing websites on the Internet are operated using Free Software[1]. What is the importance of all this for sociology? Why is Free Software social phenomena worth studying?

To start with, the mode of production of Free Software differs from the modes used in all modern economies and states, whether capitalist or socialist. The main differences are voluntary participation, organization of work, and relation to property – software should not have owners (p.45). Production that occurs without any form of coercion is rare in modern industrial society. Voluntary production whose final product ends up running large parts of today's entire communication and electronic computing has to be a unique phenomenon in modern history. Production of Free Software was not profit driven at first, nor directly financed. Yet, it spread worldwide and influenced the way world is today[2]. Key theoretical problems this research will investigate are related to hacker ethics, Free Software and allocation/distribution of wealth in society. I will show how the use of Max Weber's work to theorize Free Software can lead us to conclude that, contrary to what many other authors claimed, spirit of hackers has a lot more similarities with the Protestantism, than the capitalism itself. Through the work of Alain Badiou and Slavoj Žižek, I will argue for a reading of Free Software as a political act, act whose consequences can be far reaching if we applied it – especially its axiomatic approach to decommodification (Stallman, 2007b) – to any other science and arts that can be stored and shared digitally. Reading Ranciere, I will argue that acts of peer-to-peer networks, sharing of millions of people worldwide can be read as a re-conceptualization of democracy. Finally, I will ask why are we, the rich North countries, especially Europe where most of the drugs research comes from public funds, not using the example of Free Software to act ethically when it comes to deadly epidemics of malaria and AIDS in parts of the world.

2   Hackers and the Protestant ethics

For Himanen (2001), it is the hacker ethics that drives the development of Free Software. Hacker[3] not meaning just a computer spe-

cialist of certain type, but any person who practices some of the hacker ethics. It was Levy (1984) who first formulated main point of hackers ethics as: a) access to computers (and anything which might teach you something about the way the world works) should be unlimited and a total, hands-on approach is imperative; b) all information should be free; c) mistrust authority and promote decentralization; d) hackers should be judged by their hacking, not bogus criteria such as degrees, age, race or position; e) you can create art and beauty on a computer; f) computers can change your life for the better[4].

Hackers are inclined to become obsessed with their work. They pursue it relentlessly, often at the expense of other aspects of life. Because of this, they have been portrayed as anti-social, weird in ways which "normal" human beings cannot understand. Yet, their work differs significantly from what we consider today to be a dominant paradigm of capitalist society, the Protestant work ethic. According to Himanen, it is social motivations that separate those two ethics: in the Protestant ethic work has invaded leisure and aspects of private life, like finding a spouse and having friends, are frequently carried out work. Those social activities at work serve in the Protestant ethic to distract attention from the idea that pursuing one's passion should happen at work too (Himanen, 2001: 51). Although for hackers what they do (but not necessary the employment) is passion, why would people in such large numbers work in their leisure time too just to give the result of their work away in the public domain, for free? The linking of a contribution to society with passion is what for Himanen characterises the hacker ethic a powerful model. Recent empirical research in which 680 Free Software programmers were interviewed concluded that enjoyment is the biggest reason why hackers do what they do (Lakhani and Wolf, 2003). A paradox that remains theoretically unresolved is how can people with

such socialization elements (high priority to work, frequent aspects of strange communication with other people) and values of individual freedoms have at the same time such a firm link to the society and what they consider good for it. The company Google understands this well and implements aspects of it in practice by allowing its engineers to spend twenty percent of their time at work working on their own technical projects, not necessarily linked with what company does. For a hacker, "making a living" is a depressive, unbearable option that he replaces with "it's my life", as Himanen (2001, 40) correctly observes. The curse of the Protestant ethic of work as necessary suffering that one is obliged to withstand, the iron cage built by our rationality, as Max Weber concluded on the character of this modern lockdown of humanity (Weber, 1965: 182), thus, even more paradoxically, gets hacked, reused in unexpected, unintended ways, by the people engaged in one of most rational tasks, computer programming. Is that not what hackers are doing to the computing tools and global communications networks built to a large extent for military and profit making purposes, reusing them in their own way, redefining some of the core postulates of our time: why do we work how we work, what is our relationship with the product of our work and what do we do with the results? The answer to the question "why" is for hackers clear: because it is pleasure, not suffering. How? In collaboration, sharing the results and internals of what is produced, with open access for anyone whose material conditions allow them to observe and engage in what is done. Can hackers have the last laugh, as simultaneous co-creators of the iron-turns-silicon cage and its hackers?

When Max Weber concluded that the Protestant ethic is a driver for he development of capitalism, his main argument focused on an ethic of dedication to work, and, most importantly, of saving the profits, which

in turn leads to the investment of accumulated capital. This was one of the key elements how, according to Weber, the capitalist machine got moving. Castells (1996: 200) agrees with Weber and adds that to explain society today, we need to have "some kind of cultural glue" that makes social actors behave in similar fashion on a large scale, and that purely rationalist explanations, for something as large as emergence of capitalism, aren't enough. There are also recent works (Mikkonen et al., 2007) in which very similar conclusions are drawn, this time from empirical data collected, through interviews and questionnaires, from communities of programmers. The findings reaffirm some findings of Himanen's Hacker Ethics, most known of all writings in this direction, stating that motives for participation in open source and free software production today are mainly for the material benefit of participants. Yet, Himanen's research left many questions open and posed hacker ethics as a threat to protestant ethics, while Mikhonnen's research concludes that some sort of special ethics of hackers is a myth. Overall, these researches agree with Weber's use of concept of the Protestant ethic as the spirit of capitalism and analyze hackers in relation to it, starting from the hacker ethic as being in opposition to the Protestant ethic, and concluding that reality is lot simpler, since hackers end up joining the forces of capitalism and the Protestant ethic in the end.

None of this was convincing enough for me, starting from Weber's use of only a few elements of Protestantism, followed by a superficial use of his work in the sociology of hackers during last ten years[5]. They agree with Weber all too quickly, and offer no close reading of Weber's work, nor of the key concepts (religion, Protestantism, rationality) that made that work possible. Himanen's work touches upon the kind of reading that I believe is necessary, but it is still playing it far too safe in far too many areas[6].

I'm tempted to start from the opposite position. For the benefit of his conclusions on Protestantism as the spirit of capitalism, Weber presented Protestantism as a single, unified whole, although he was fully aware that that was not the case[7]. Using Weber's conclusion presents us with an all too easy to use, yet deceiving, formula. To use it as label, as a quote that one can just attach to one's work, as Castells and others do in explaining social phenomena of hackers and our computing age, betrays both the complexity and the richness of Weber's work and of the situation in which we find ourselves today[8].

Hackers are not a challenge to the Protestant ethic, quite the contrary. I'm tempted to claim they are far more protestant than what capitalism can bare, hence their uneasy fit. Open Source is a movement that, with quite some success, attempted to "pacify" Free Software, to bridge the gap between Free Software and capitalism. Project Oekonux[9] is a good example of an opposite theoretical approach. The move of the Open Source[10] initiative to bring Free Software closer to capitalism shows that: a) there is a gap between the Free Software movement and capitalism; b) without a significant institutional intervention and re-interpretation that gap can not be overcome; c) more than practice (since practice of Open Source doesn't differ that much), it is the founding documents, principles that Richard Stallman stands by so fiercely that are the bite that capitalism can not subsume, swallow in its original form. Re-interpretation work[11] that Open Source[12], and to a large extent publisher O'Reilly[13], did, was necessary for inclusion of Free Software into capitalist economy. The task that I set for myself is similar to that of the Oekinux project, with a different path of investigation: to conceptualize, give a theoretical form to that which resists capitalism in Free Software. An expression of the hacker ethics needs to be hacked to enable future, social, hacks.

2.1   Talk is cheap, show me the code (sola code)

Let us read briefly some of the core features of Protestantism and consider what is it that made me wary of accepting Max Weber's final conclusions as a useful analytical premise on its own i.e. stripped of the rest of his research. Although these will be formulated as questions for further research – since answering the doubts I'm raising here comprehensively is beyond the scope of this dissertation – it is necessary to deal with them, given the prominence other authors give to Weber's work when discussing hackers and Free Software.

The core arguments on which Weber built his theses, as Towney summarized so well in his foreword (Weber, 1965), rely on a specific branch of Calvinism, on the writings of English Puritans in late seventeenth century, and it is possible (we don't know, as yet) that quite a different picture might have emerged had Weber focused on early key Protestants texts, or on any other of the large number of interpretations of those texts and of the practices of various sects of Protestantism. For Weber (1965: 36), the most intriguing question of the sixteenth century, to which he admitted there is no simple answer, is this: why did a large majority of the economically most prosperous parts of Europe, the wealthy towns of the time, convert to Protestantism. The link, he believed, between "emancipation from economic traditionalism" and challenge to the control of the Church over everyday life definitely existed in some form. Dutch, English and Americans Puritanism was opposed to joy of life, Weber tells us, and it would be a mistake to link this awakening in any way with the Enlightenment, which is, given some its prominent characteristics, a temptation (p.45). In contrast to the life of village, privileged traditionalism was confronted with the rational calculations of capitalism. Protestantism is important for Weber because it formed a stage prior to the development of rationalist philosophy. However, such philosophy had its own track of development and to explain it only in terms of Protestantism would be wrong (p.75). It was the Pietistic branch, whose "enhanced abilities of mental concentration and essential feeling of obligation to one's job", combined with self control and economic thinking which calculated possibles of high earning that was a key element, and a paradox, that linked the two, an element that was necessary for the rise of capitalism, and that provided "most favourable foundation for the conception of labour as an end in itself, as a calling that is necessary to capitalism." (p.63). People filled with the capitalist spirit are irrational about their work, since they exist for their business, and not the other way around (p.70). Central to their capitalist life-work was provision of humanity with material goods (p.76). Yet, it is not the extreme rationality in the idea of devotion to labour that is primary interest for Weber, but its irrationality from the position of self-interest based on personal happiness that sits at the centre of his work on spirit of capitalism (p.78). His goal was not to evaluate the ideas of the Reformation in any sense, nor to suggest that capitalism wouldn't have developed without Protestantism, but to investigate to what extent religious ideas have taken in part in the formation and spread of the capitalist spirit (p.91). The rejection of the Church, and in some cases of all rituals (Puritanism), was for Weber the logical conclusion of religion's historical tendency to remove magic from the world (p.105). Finally, it was methodical control over one's emotions, behaviour and time, rejection of joy, dedication to labour, provided by some protestant branches, that formed the spirit that capitalism inherited. The core principles of Protestantism should thus read as something that resembles

the spirit of capitalism that we know of today.

The basic theological points of the Reformation are called the Five Solas. The first one, Solus Christus (Christ alone) refuses Pope and church as Christ's representatives and preaches that Christ, and no one else, mediates between God and man. The second one, Sola scriptura, refuses the need for a Church to interpret the Scripture and the Church's monopoly on such interpretation. Protestants believe that people should read the Scripture on their own and make up their own minds about it, without external interpretation. The third one, Sola fide, asserts that it is on the basis of faith alone that believers are forgiven. The fourth one, Sola gratia, claims that believers are accepted without any regard for the merit of their work; God decides on his own. The fifth and last one, Soli Deo gloria, preaches glory to God alone, and denies that saints of the Roman Catholic Church, including popes, are worthy of the glory assigned to them.

Not all of this maps to hackers and Free Software. Yet, if we are to speak in terms of spirit like Weber did, in terms of the general mood of the Five Solas, there are striking similarities. Throughout, like hackers and Free Software, the spirit of Protestantism is in favour of direct engagement of individuals, and the proliferation of interpretations and organizations to support these if needed. It arose against the centralization of the Roman Catholic Church, privilege in interpretation of people chosen by the Church, and against the Church's extraction of wealth from its believers. At that time, those were anti-institutional, anti-hierarchical and anti-bureaucratic principles. Although the high number of branches of Protestantism was criticized by Calvin, principle was withheld in practice. This resembles the hacker's principle of forking a project: if you don't like what is someone else doing with some project, you

take a copy of the source code[14] and start work on it in the direction you wish. The principle of scripture alone is similar to the hacker's dedication to the code, the text that makes all software what it is. All doubts about interpretations can be resolved by looking at the source. For all hackers, to dive straight to the source code is not the last resort, but rather the first course of action. Interpretation is personal, direct and engagement with no proxy is in most cases the only right option. Trust in people's ability to dive straight to the code, to make up their own mind by reading it, to make a critical evaluation, to decide for themselves, are key for hackers. This unmediated contact with the scripture and trust in people is embodied in the Free Software principle of "freedom to study how software works and adapt it to your needs, access to the source code is precondition for this" Stallman (2002). Aiding capitalism, allowing economic emancipation of individuals was for Weber a side effect of Reformation, not its intended purpose, regardless of its insistence on individual material gains, and its dislike of capitalism, demonstrated by Luther, for example. This paradox is best seen in the quote of John Wesley where it is clear how well Wesley is aware of the paradox (Weber, 1965: 175). Capitalism didn't follow main principles of Protestantism, it followed some of them, those that suited it. If it had followed Protestantism to a large extent, it wouldn't be so difficult to fit hackers and Free Software into capitalism. The dark mood in which Weber concludes his book, the last few pages that are misused as a label so often, state the problem more precisely: "Puritans wanted to work in a calling; we are forced to do so"(p.181). Puritans, not all Protestants.

If there is one important part of the hacker ethics that might go against the Protestantism, it could be its insistence on doing the work as enjoyment and improving the technology so that it can serve humanity and

so that humans can be lazy. Two hackers of the highest standing, Larry Wall (inventor of programming language Perl) and Yukihiro Matsumoto Matz (inventor of influential programming language Ruby), both stated it on many occasions: for a true hacker, laziness is a virtue, and computers are there to serve humans. Both of them are very religious, and Matz even served as a missionary for his church. Linus Torvalds, one of the most important hackers today, is known for statements that can be seen as fundamentalist. Consider this from the Linux coding style guide: "Heretic people all over the world have claimed that this inconsistency is ... well .. inconsistent, but all right-thinking people know that a) K&R are _right_ and (b) K&R are right"[15] (K&R are Kernighan and Ritchie, inventors of programming language C). Or, this from one of his interviews: "Which mindset is right? Mine, of course. People who disagree with me are by definition crazy (Until I change my mind, when they can suddenly become upstanding citizens)" (Barr, 2005). Richard Stallman, because of what some considered inflexibility when discussing core premises of Free Software, was seen as a fundamentalist. Debates about preferences to which software, or which programming tool, to use are frequently referred to as religious wars[16]. All of this is left mostly untouched under the framing of business friendly Open Source. This is not a coincidence. Anything that gets included into capitalist economy has to be stripped of any previous attributes and represented as a *mere commodity* (Žižek, 2006), an entity to be produced, sold and utilized. There are two sets of complexities that are erased in a single move of becoming open source: that of Free Software prior to its inclusion into the capitalist economy, and that of the commodity form itself - base entity of the capitalist economy.

2.2   Against memory

For Badiou (2003: 44), memory became a guardian of historical consciousness, allowing society to re-evaluate its history on the basis of new historical facts and discourses. Yet, there comes a moment, when memory can not settle the issue any more, when a debate, exchange of argument, of proof and counter-proof, has to stop and a decision has to be made, a stance has to be taken. Example Badiou gives us for this is discussion with erudite anti-semites about the holocaust: we will not enter that discussion, we will proclaim the matter settled. In the same way, for Badiou's exemplary revolutionary, Saint Paul, the resurrection of Christ was not something to be debated, it was "a pure event, opening of an epoch, transformation of the relations between the possible and the impossible" (2003: 45). This is another way to read Richard Stallman's encounter with the closed source code and broken printer: a pure event, site of decision-making where, as we witness today in the social phenomenon of Free Software, the relationship between the possible and the impossible was transformed. If this transformation was not the case, one would have to argue that the phenomenon of world-wide volunteer collaboration which resulted in of the most powerful software products in the world today, collaboration between professionals, hobbyists, students, would have been possible without the commitments and methodologies of Free Software. Badiou's reading of Paul enables us to see another paradox in the founding and development of Free Software, namely, the clash between its founding principles and those through which it developed. Communal sharing (Williams, 2002: 85) and open participation in production and openness to criticism, to alternative options, are key development methodologies in Free Software. One of the main reasons for doing it in the first place for Stallman was the pleasure of

learning and the ability to see software immediately doing something useful (2002: 79). Yet, although that is what marked the beginning of his devotion to the new cause, it was not, and still isn't, open to debate, discussion, knowledge based evaluation. For Stallman, as for Paul, it was not question of knowledge but a question of the subject, of a subjective path. In Badiou's words "this is the one and only question, which no protocol of knowledge can help settle" (Badiou, 2003: 49). Is this not an accurate description of Stallman's event and decisions? They certainly are not open: not for participation or collaboration, not for debate or discussion, not for the knowledge. Thus, we can conclude: **Stallman's event and fidelity to it stand in sharp contrast, indeed in total opposition, to the attributes of the movement he founded**.

3 Free Software, politics and ideology

A political act, according to Slavoj Žižek and Alan Badiou is not what we're used to seeing on daily basis in the liberal parliamentary arena: debates, compromises, voting on issues, forming partnerships for ongoing consultation with communities, and so on. Rather it is quite the opposite: subjectively, militantly, unilaterally, deciding what seems impossible at the time of the decision, acting in follow up to an event, event that prompts our reaction/decision, and pursuing the truth of it through fidelity to it, through fidelity to the event that changes us. For Slavoj Žižek, that is the definition of actual freedom, freedom to choose outside of given options and coordinates of the field in which choice is meant to be made. This is the difference between Žižek's concept of freedom and liberal, parliamentary, formal freedom, which consists in participating in the what is already given, already structured (Žižek,

2001: 115). Could we not say that this is precisely what Richard Stallman did with his choice of leaving the job he had at the MIT Lab to devote all his time to re-create the world of software, from scratch, with an entirely new set of social co-ordinates? One key element that he didn't envisage, the involvement of others was the unpredictable without which his creation wouldn't have been possible. His act resembles the definition of utopia that Žižek gave on few occasions, best captured in the electrifying atmosphere of an Argentinian university (Taylor, 2006) where, in front of nearly 2000 attendants, he restated how it is desperation, the lack of any other options, the urge to act, to do something that otherwise might seem totally unreasonable, that defines his notion of utopia. In that sense, Richard Stallman is one of the prominent utopists of our time. When pragmatism and neo-liberal fundamentalism seem to exclude all other options for development of human societies, such utopian acts of desperation are to be celebrated and supported.

Like the Magna Carta, the Pennsylvania Constitution of 1776, or the Declaration of Rights of Man and of the Citizen, General Public License, the key Free Software document, sets out axiomatic principles: equality for all when it comes to using, modifying and sharing one of the most revolutionary means of production humanity has ever invented: software, the means for automating machines to produce what we instruct them to do.

This is Badiou's revolutionary economic justice, but in the unexpected sphere of software: "all software should be free and the prospect of charging money for software was a crime against humanity" (2002: 85). Would it not make sense to expect this kind of radical stance when it comes basics like shelter, food, health treatment, education? Why are obvious question like these not being discussed, even though Free Software has drawn a great deal of attention? Are the free-

doms that Free Software is based on so specific to software that it makes no sense to think whether the same can be demanded and achieved for the above-mentioned basic spheres of material and intellectual life? When asked whether programmers deserve reward for their creativity, Stallman's reply was that if anything deserves a reward it is a social contribution. For him, creativity can be a social contribution only if its results can be shared (2002: 105). If we applied the same logic to other spheres of life, the consequences for this statement would be far reaching. Consider the economy. What would it mean to assert that economic productivity can be a social contribution only if its results can be shared? It is already shared, many would say: one gets a salary for one's work. This would hardly satisfy Stallman's criteria. For Badiou's Paul, pay can never meet the demand placed on the society by one's contribution . Pay can only delay the eruption of that demand, I would add.

Badiou warns us through Passolini's published, but never filmed, script on Paul, how Passolini saw Paul as a revolutionary wishing to destroy a model of society based on social inequality, imperialism and slavery. The Church, a key institution of oppression for dozens of centuries, which in practice worked against Paul's mission, integrated the milder parts of Paul's teaching into its own scripture, on the grounds that it was better to have him on their side in some acceptable form, stripped of his radical elements, than to leave him in heresy, free to unleash his teachings in its full radical potential (Badiou, 2003: 36). This is how, today, we can define the freedom of piracy in relation to arts, science and Free Software. These are heretical acts of our times, heretical to the neo-liberal neo-conservative mix of seemingly unstoppable powers that today combine military with the regime of law to occupy a wide range of material, artistic and scientific aspects of life throughout the world. Today, sharing the

wealth of digitally reproducible arts and sciences has become the heretical act of making such wealth more common, of creating the space and culture of more common human action, of exposing the false, imposed logic of scarcity. These acts are fronts which could redefine future political battles, on national, supra-national and global levels. They raise key political issues, issues that have inspired revolutions that framed the idea of emancipated humanity: questions of property and the division between public and private. It us up to us to recognize those questions, to give them forms that are inescapably political, divisive and antagonistic towards the ruling capitalist parliamentary ideology, and act through the rupture that those forms open up, primarily in the hegemonic discourse of private capital. It is worth recalling how Rancière (2004: 303) posed one of this key questions and its connection with politics:

> "The Declaration of Rights states that all men are born free and equal. Now the question arises: What is the sphere of implementation of these predicates? If you answer, as Arendt does, that it is the sphere of citizenship, the sphere of political life, separated from the sphere of private life, you sort out the problem in advance. The point is, precisely, where do you draw the line separating one life from the other? Politics is about that border. It is the activity that brings it back into question."

Transfered to the realm of Free Software, it is the declaration of software sharing as a right – known as freedoms 2 and 3 (Stallman, 2005) – that challenges both the question of the border between private and public and that of property. In today's capitalist order, we are free to use the commodities we acquired, free to do whatever we want with them, to destroy them, give them away, or put them back into

circulation as commodities. With electronically storable commodities, like some artistic works, science and all software, commodity users are in the position to multiply those commodities and offer them to others for use easily through networked computers. This introduces a rupture with the functioning of the capitalist economy which may thus be deprived of the potential profit that could have been realized if the same multiplied commodities were not shared amongst users, but sold by the profit-making actors, and bought instead. When commodities are exchanged between users on a large scale, as they are today on the peer-to-peer networks, capitalism panics and looks for ways to prevent this. Most of the exchange on peer-to-peer networks is not free software, but films, music, software in general, newspapers and books. Yet, not only that vast majority of those networks are run by Free Software, it is Free Software principles and work practices that set the precedent, that made claims that destabilised the flow of those commodities and the structure of the ideology which governs that flow today.

Free Software's most controversial claim is that software should be free to obtain, modify and share. Richard Stallman justifies this principle by arguing that encourages cooperation, helps social cohesion and is beneficial for all, and not just for a few, which is not the case when software is treated like any other commodity. Free Software is about ethics, and law should follow ethics, not the other way around. An examples is the creation of copyright and patents, brought into place because it was thought that it was beneficial for society to protect and encourage creators of art and science. Today, discussing software, Stallman claims that this is not the case any more. What if we apply the same model to all commodities which can be multiplied and shared electronically, digitally storable arts, science and entertainment (Stallman, 2002: 73)? In other words, what if all current peer-to-peer Internet ex-

change proclaimed the same rights that Stallman proclaimed for software? One obvious difference is that Stallman is the creator of software who refused to treat it as a commodity in the capitalist economy, and who offered a generic way for doing so, while artists and scientists whose work is being exchanged on the networks didn't necessarily do the same. Instead, users made the decision, regardless of what creators think of it. Why? Because they can, because it is relatively easy to do and because the reward is vast, easily obtainable amount of entertainment, education and production (software) material. Isn't this similar to the labourer/capitalist relation? Capitalists do whatever they want with the product of workers whose labour they buy. I hear you saying, but what about the salary? Isn't that the pay in return? Of course it isn't! Labour is sold under the conditions entirely set by the owners of capital who require labour. With the exception of a tiny number of stars, there is no negotiation about the way in which relation between capitalist and worker will be formed. It is an one-sided offer to the worker: take it or leave it Today, even for highly skilled workers, that offer contains clauses which state that copyright for all work, related to what capitalist enterprise does, done by the worker belongs to the capitalist. Including any work done during the time off paid work. Again, with rare exceptions, there is no choice about this clause, it is a widely spread practice. In short, worker has to comply with the rules set by the capitalists. He/she has no choice. The capitalist takes away any participation of the worker in anything to do with the product, other than the salary. In vast majority of the cases, in the West, that salary is enough to live on, participate in the consumption of mass produced commodities, but no more than that. State does prescribes some rules about those work relationships but those do not enter the sphere with which we're concerned with here. The worker has no means by which she can

challenge her relationship with the product of his/her work. The freedom of choice that capitalists and their state regimes like to praise so much is confined to the sphere of commodities and consumption only.

3.1   PeerToPeer and Free Drugs democracy

When digitally storable entertainment, art and science are denied commodity status, we can see this as a rare case of people internationally imposing their will against all the odds, against capitalists, states and laws. As reflected in the sales pitch of the largest network company in the world, it is widely acknowledged that peer-to-peer traffic makes up majority of all broadband Internet traffic (over seventy percent in the highest estimates) and that it "consumes network resource without creating additional revenue" (Cisco, 2007). What is this if not gigantic decommodification by any means available? Through those networks, part of what capitalists take from people through surplus value, through profits, through denial of participation in the results of their labour and through centuries-long undermining of development of democracy, is being taken back. Users of peer-to-peer networks see no need for such goods to be treated as property.

Why not call this democracy? Because it shuns the concept of the liberal right to property? What if people, vasts number of people, like it is the case with peer-to-peer networks, do not care about the right to property in the case of digitally storable entertainment, art and science? Isn't democracy, in the liberal concept, meant to be the rule of the majority? On this issue, can it be any clearer what the vast number of people, possibly majority of people, want? And doesn't this give us a glimpse of how different society could be if neither creation of laws and policies, nor structuring of society through political acts according to those laws and policies (education in UK is again a good example of this), is done through liberal-capitalist political forms of parliaments, elections, representatives? Thus, corporate and state repressive acts against the sharing of digitally storable entertainment, art and science are anti-democratic acts. Instead, rewriting of laws on property to support sharing whenever possible, like in these digitally storable cases, would be an act in the spirit of democracy. Such democratic acts are prevented through the forms that liberal-capitalist politics takes. Challenges that peer-to-peer networks acts of sharing create are not just challenges to the liberal ideology of property rights and to the ways through which laws and political institutions treat digitally storable property according to that ideology, but to the above mentioned political forms through which liberal-capitalist coalition asserts its anti-democratic ideology and rule.

For Ranciere (2006: 96)

> Democracy is neither a form of government that enables oligarchies to rule in the name of the people, nor is it a form of society that governs the power of commodities. It is the action that constantly wrests the monopoly of public life from oligarchic governments, and the omnipotence over lives from the power of wealth.

Yet, regardless of his disagreement for the potential for a democracy of multitude through immaterial forms of capitalist production (Foucault (1980: 27) warned Maoists to reject the state for similar reasons), we're following Ranciere's affirmative description of democracy: egalitarian society as a set of egalitarian relations traced to singular, precarious acts. Free Software is one such act.

As well as Swedish pirate party and its call for removal of pharmaceutical patents (Pirate Party, 2007).

Given today's drugs, AIDS could be contained worldwide in relatively short period of time, but corporations and governments stand in the way of millions dying being protected (Badiou, 2007). Like people who decide to share online, they choose to do so, because they can, because nothing, no one, stands in their way. The production of drugs could follow the example of Free Software, be created in a more collaborative way, publishing recipes and allowing it to be freely produced, by anyone, for any purpose. If this was the case, controllable and curable diseases like malaria and AIDS, who together kill tens of millions of people every year, could be put under the control in most of the world. Yet this doesn't happen. Why? We can assume it is because their work needs different tools and material conditions, and that prevents them from working in low cost environments, which confines them to academic and corporate world. If later is the case, we could conclude that it is the domination of capital over all other considerations, primacy of private over public, that prevents decommodification acts of Free Software to be repeatable in the sphere of free drugs. However, as the Swedish Pirate Party demonstrates, in Europe, the vast majority of drug research money already comes from taxes. Hence, a Free Software model for generic drugs might not be such a remote proposal. Instead of pushing through a neo-liberal constitution, Europe could, and should do the opposite act, create an institutional Free Drugs scientific movement, based on the Free Software hackers model, following the logic of copyleft (Stallman, 2002: 89), patented for free production and reuse of all documentation, as a gift of its citizens to the world. One could argue that after centuries of military domination and exploitation, something like this is due. When ethics and its laws in the West

allow death on such scale to occur, although the society has the means to prevent it, we have to ask: what is the difference between tens of millions dead in two world wars and the dead of malaria and AIDS today? The former were killed while later are allowed to die. Ethics complicit in mass death, an annually repeated disaster, not an one off event like the world wars, is the ethics of the West today: because our laws allow those deaths to occur.

The Creative Commons and Free Culture movements (Lessig, 2004) are attempts to provide other creators – in the fields of art and science, in branches where low-cost production is not entirely dependent on submission to the dictate of private sphere and of capital – a simple way of releasing their work into the existing legal framework under rules related to those of Free Software. While neo-liberal ideology divides people into strictly managed consumers whose interaction with society is measured in detail and accordingly monetarily arranged (recent example of this in the UK are student fees where the main claim is that it is those who study and their families that should bear the cost, and not society at large), Free Software claims that it is worth contributing to society at large, worth sharing and cooperating. Stallman challenged the conservative dogma that "there is no society"[17], showing, through his axiomatic, unilateral acts, through his fidelity to the event (broken printer) and principles that came out of it, that there is, indeed, a society, since, there is something that is socially beneficial i.e. global collaborative production of globally shared wealth, in the sphere of software.

At the same time, corporations like IBM and Oracle, some of the main engines of this world order, of our silicon cage, have been integrating Free Software into the core of that world order. It is our task, as Badiou and Passolini did for Paul, to make it difficult, hopefully impossible, for them and their ide-

ological partners, to integrate a milder, capitalist friendly, or even capitalist agnostic, version of Richard Stallman's revolutionary truth, his fidelity to the event that changed him, and to the world we share, truly share, when it comes to software. Our task is to insist on the potential of coordinates that his act has rewritten, on new coordinates of possibilities that his acts opens up, coordinates of global collaborative, voluntary, production of common global wealth, of Free Drugs and similar ideas. In Stallman's own words: "constructive anarchism does not mean advocating a dog-eat-dog jungle. American society is already a dog-eat-dog jungle and its rules maintain it that way. We [hackers] wish to replace those rules with a concern for constructive cooperation." (Levy, 1984: 416). Reasons for Free Software are possibly best explained in earliest words of Stallman from 1983, when he didn't believe that software should be owned, because such practice "sabotages humanity as a whole" (p.419) - this is precisely what capitalism does in the example of life saving drugs given above. Today we know that he wasn't alone feeling this way, because the results of his call for collaboration are known: it is a success. Given the hostility of capitalist economy towards the kind of ideas he stood for, it is a huge success. Yet, what if all obstacles to cooperation and sharing sabotage to humanity? And how do we proceed towards global collaboration and the creation of global common wealth in the spheres of life which do not posses the magical attribute of software, science and arts, which makes the latter electronically storable and reproducible form, in Western terms, low cost?

Many, including myself, have tried to study this question by investigating what is specific to the production of Free Software in the context in which it takes place and whether Free Software principles can be applied to material production. But, so far, the more I looked, the more research has lead me to think that these questions cannot be investigated in isolation. Before we can think about them, other issues have to be studied first. The large scale on which society has lost the track of ideas of equality, cooperative production and shared wealth – the scale of the loss of belief in the possibility of such ideas and political projects – has to be dealt with in parallel to the phenomenon of Free Software. It is not possible to invent new politico-economic practices without inventing an ideology that will provide a framework to support them. Without such a framework of thought, any action will remain embedded in the currently ruling (neo)liberal capitalist framework. To give a small example: there is plenty of talk about the openness of software source code in England, yet, the land registry, strangely enough, remains closed. And apart from fringe activist groups, no one seem to be concerned with it. In the city where this text is written, one man, known under the title Duke of Westminster, among his other vast assets, owns large parts (120 hectares) of the land in one of the most expensive locations in the world, central London. His ownership is the outcome of the forced enclosure of common land, which was the start of privatization of common resources in UK, yet there have been only two surveys of land ownership in British history: the first was in 1086, and the second was in 1872. To this day, there is no mandatory record of land ownership in England. How convenient and easy it is to forget that, while a large part of the software source code that assists life on this land might be available to inspect, change and share, information on the ownership of the land, the most basic resource on which all human life depends, is not. Yet there is hardly any challenge to this glaring paradox. If we examine the concepts on which Free Software thrives – such as access to source code, open collaboration, sharing, placing ethics before law, reliance on axiomatic principles – in the wider social context, in the context of

the creation and concentration/distribution of wealth throughout history, we find vast paradoxes, in every sphere of life I considered. In other words, we face the question of how to challenge and reinvent ideas and beliefs first; practice follows second. If this was not the case, if the importance of ideas and beliefs was not central, the rift between Open Source and Free Software would not have been such a great issue. Although Stallman understands the importance of ideas well, the core of his explanation of this rift misses the most important point about ideology, a point which Žižek so forcefully brings back to our attention again and again: it is not enough to say that we're just doing something, but that we don't believe in it, or that we don't have a set of beliefs as such. This is how ideology functions: it requires us to do things, and belief arrives as a result of doing it, not the other way around. And what better proof do we need than successful spread of the rule of neo-liberalism through their claims of "just doing it" for the sake of the economy, without any ideological beliefs? As if any economy, or any act, was possible without decisions determined by a set of ideas and beliefs. This is why Nike's slogan "just do it" is the best summary of capitalist ideology ever. And this is why "Open source is a development methodology; free software is a social movement"(Stallman, 2007a), misses the crucial point. We need to recognise this point in order to be able to engage in the analysis of ideas about Free Software, but more importantly, in the analysis of ideas in their historical context, which carries all the traces of the paradoxes which the existence of Free Software makes manifest. It is crucial to understand, and always keep in mind when thinking about Free Software, that Open Source is not just a development methodology, but a social movement too, a social movement of a different kind, with different, capitalist, goals. A proof of the strength and effect of its ideology is in our inability to see it

as a social movement with defined goals, or at least in our failure to insist on analyzing it consistently and thoroughly as such. For example, Stallman, like most other Free Software writers, clearly points out the business orientation of Open Source, even quoting its founding members, whose main goal was to make Free Software business-friendly. No one disputes this well-documented history. The problem lies in claims that Open Source separates ethics from the technical side of Free Software(Stallman, 2007a), thus making it acceptable to corporations. Like the above claim that Open Source is just a development methodology, this kind of thinking implies two wrong statements about Open Source: first, that it has no ethics of its own, and second, that there are purely technical solutions which can be used without any ethical, political, or ideological commitments. The result of these mistakes is the widespread comparison of Free Software and Open Source on the wrong terms: one operating under the weight and demand of its ethics, and the other getting away without being examined at all, basking in the purity of its technical attributes and various *business-friendly* tags. This is how the ethics, ideology and, indeed, politics of Open Source slip through unexamined and unchallenged, like capitalist ideologies whose crucial strategy has historically been to accuse any political opponents of ethical commitments, while insisting on their own "pragmatism" and on the purely technical aspect of "just getting things done".

4   Revolutionary justice

One of the important ideals of hackers was not just getting the job done, it was getting it done in the best possible way. To do so, access to the most useful information, at all times, was essential - another reason for dedication to openness of information as a nonnegotiable principle. Other important ideals

were to have access to the best possible computer and to always striving to excellence and elegance (Williams, 2002: 47). In computer programming, elegance is linked with simplicity, readability, re-usability and non wasteful use of resources[18]. Dennis M. Ritchie (1984), one of designers of the Unix operating system considered the principle of non-hierarchical control of the flow, achieved by the invention of mechanism called a *pipe*, as "one of the most widely admired contributions of Unix to the culture of operating systems and command language". Since changing the world through software was what hackers spoke openly about, it shouldn't come as surprise that what they saw as worst obstacles were poor software (non excellence), academic bureaucracy (opaqueness and fixed structure) and selfish behaviour (Williams, 2002: 48).

For Levy (1984: 41) the openness that hackers believe in, free flow of information, is not just fundamental to pursue of improvement and knowledge, but also to the functioning of computer code where it is up to programmer to devise how information gets moved, processed, and which components of the system (hardware, network) take part in it. According to him, one of the biggest enemies of hackers is bureaucracy of any kind (corporate, government, university), because it can not incorporate impulses of hackers to explore and because it hides behind arbitrary rules invoked to keep the power while perceiving hackers' desire to construct new as a threat. At the heart of this dislike was hackers' preference for work and life organized in a de-centralized, meritocratic way where "hackers should be judged by the way they judged by their hacking, not bogus criteria such as degrees, age, race, or position" (1984: 43). This brings us to another aspect of open access in Free Software, equality.

In Richard Stallman's words, signing a non disclosure agreement meant promising to refuse to cooperate with the entire planet (Williams, 2002: 21). In Unix, operating system that inspired the creation of Linux, design goals are to allow multiple users to access the computer at the same time and share resources (Lucent Technologies, 2002). Although to this day the most widely used operating system, Microsoft Windows, is designed around the concept of a single computer for a single user, the vast majority of the world's communication systems, including the Internet, runs on various computer systems derived from Unix design philosophy of simultaneous multiuser sharing. Paradoxically, at a time when an ideology of the dominant West thrived, through the victories of the neo-liberal project based on declared individualism and reckless consumerism, it was the invention of computing components (Unix/GNU/Linux) and principles (Free Software) for cooperation and sharing that enabled the West to make rapid scientific and military progress. Today, when it seems that even Europe has imploded into it, the neo-liberal ideological project[19] and an evolved form of this technology for cooperation and sharing (Linux/Free Software), coexist in parallel.

Coleman and Hill (2004) show how two organizations that are generally considered to be diametrically opposed to each other in political terms, Indymedia[20] and IBM both use Free Software successfully, and both promote it enthusiastically as desirable and beneficial, simultaneously in line with the ideological frameworks of the global capitalist group, IBM, and the similarly global alter-globalization group Indymedia. In one of the most interesting researches on the subject, for Coleman (Summer 2004), main political characteristic of Free Software, according to claims made by the people involved in its production, is agnosticism. Programmers consider politics to be dysfunctional, not reliable and getting in their way of getting things done. Instead, as expressed in the main documents of

the movement, their "commitment is to prevent limiting the freedom of others" while allowing for unbound circulation of thought, expression, and action for software development. Although it is clear that Free Software has been highly beneficial to various political actors, it is unconvincing to say that it is politically agnostic because official political sphere doesn't interest Free Software producers, or, as Coleman develops it, because it functions as internal criticism of liberalism by liberalism, criticizing the concept of intellectual property using the concept of free speech (Coleman, 2005). As she correctly observes, its roots are drawn from the liberal value of free speech, which, if we would call it politically agnostic – regardless of what its producers claim – would privilege position of liberalism as one outside of ideology. We know that such position doesn't exist (Žižek, 1994: 1-32). Quite the contrary, liberal ideological postulates are the basis for today's attempts of the West to impose a new, more sophisticated, form of imperialism (Mattei, 2003). Coleman claims that "Free and open source hackers have been effective in coding FLOSS as politically removed neutrality made material and socially effective through licenses." (p.513), but as we saw from the Open Source movement starting goals, and consistently through their acts, they worked hard to convince capitalist elite, specifically targeting Forbes 500 companies, that one shouldn't be put off by the radicalism of Free Software. Ian Murdoch's claims about natural laws of the markets are textbook neo-liberal political propaganda. Hence, when Coleman writes about software participants and how "It is felt that if FLOSS was directed towards a political end, it would sully the purity of the technical decision-making process." (p.512), does that exclude people like Ian Murdoch, or indeed entire ideological leadership of Open Source movement? Does it mean that their persistent sales pitch to capitalist

elites spoiled technical decision making process? If that's not the case, should we not conclude that, in order to justify Free Software producers' own theses on political agnosticism, we should treat capitalism as politically neutral, hence the Open Source sales pitch didn't compromise on directing Free Software towards a political end, because capitalism itself is politically neutral? In Coleman's own analysis, in several places, she points out political aspects: how Free and Open Source Software practices challenge neo-liberal expansion of intellectual property rights through copyleft, or how it served as a template for other social groups too (Coleman, 2005, 15-16). How are we to reconcile this with notions of neutrality, or political agnosticism? These seemingly un-reconcilable sides: anti-capitalist activism and criticism of neo-liberalism versus capitalism and neo-liberal propaganda, are both part of social phenomena which is, and I agree completely with Coleman here, both intriguing and frustrating to a researcher. What to me seems to be the source of further complications of this problem, in Coleman's work, is mixing of Free Software and Open Source into one term (F/OSS, or FLOSS). Stallman explained the importance of differences between the two on many occasions: Free Software is a social movement; its freedoms promote social solidarity, sharing and cooperation; Open Source is a development methodology considered by some as a pragmatic campaign for free software, while some reject any ethical and social values of free software and focus only on technical aspects (Stallman, 2007a).

This strange path of logic of technical decision-making process and its purity is uncannily close to the neo-liberal use of the general concept of technical decision-making in governance, a political ideological concept where opinion of specialized workers is presented as apolitical, thus allowing the rule of "experts", regardless of the formally existing

political power structure. Is it coincidence that these apolitical specialists, those "administrators of local consequences of global historical necessity", as Ranciere (2006: 81) calls them, are always proponents of the same known principles that neo-liberalism thrives on? How come there are no anarchist, communist, or even social-democrat specialists whose apolitical purity will drive policies of entire states regardless of what type of government actually rules? The answer is unsurprisingly simple, because those specialists aren't neutral, aren't apolitical.

For Stallman, Free Software is an ethical imperative. I would add that, as analysis shows, Free Software is also a politics act. At the time when rich dominant Western entities (states, corporations, lobbying organizations), through patents[21] and copyrights, work on imposing the regime of their rule over more of the world's knowledge and productive information, at the time of this latest wave of enforced commodification, privatization and centralization of wealth, Free Software is a movement that acts in the opposite direction, direction of de-commodification, enlargement of public sphere, and decentralization of wealth through shared software. Open Source is an explicit, clearly stated, attempt to re-direct, re-package, Free Software towards neo-liberal political actors and their goals. Although Coleman is technically right when she writes that for hackers "ideal and idealized form is a transparent meritocracy." – Free Software community is indeed proud for its openness to participation – it is worth remembering that Stallman's starting principles are anything but meritocratic. He didn't say that those who contribute more to society will get more and better software, or that those who can afford more will get more. Free Software freedoms are for all users, without any reference, or implied link, to their merit or wealth. This is the radical egalitarian and

political message. Useful example of Free Software's political potential comes from Peru, where Free Software became a way to adjust political economic relations in favour of less powerful state, a political question in the most classical meaning of the word. After long lobbying, government decided to turn completely to Free Software because it is the only way to guarantee its citizens that the constitution will be upheld (Chan, 2004).

In his recent book, Badiou (2006) sets up four main principles for the revolutionary justice: voluntary participation, economic justice (wealth redistribution), terror (punishment for sabotage and contra-revolution), trust in all people. Free Software maps well onto three of these, while missing the terror. However, idea of punishment, base for terror, for sabotage is not unknown to Richard Stallman: "Those who do not share their creativity with society deserve to be punished" (Williams, 2002: 105). During the "Symbolics war", fight with one of the first companies that denied access to source code to Stallman as early as 1982, he was thinking of wrapping himself in dynamite and blowing whole building out (2002: 97).

5   Hacking the regime of equal rights

Let's recall main premises of Marx's Critique of equal right in his Critique of Gotha programme:

> "equal right is an unequal right for unequal labour ... Right, by its very nature, can consist only in the application of an equal standard; but unequal individuals are measurable only by an equal standard insofar as they are brought under an equal point of view, are taken from one definite side only ... one worker is married, another is not; one has

more children than another, and so on and so forth. Thus, with an equal performance of labour, and hence an equal in the social consumption fund, one will in fact receive more than another, one will be richer than another, and so on. To avoid all these defects, right, instead of being equal, would have to be unequal." (Marx, 1993).

These are the limits of egalitarian potential of Free Software, or any other system of right proclaiming principles. Yet, there is an element of Free Software which fits in Marx's vision of communist society. One of the most important principles Marx envisioned for communism was "From each according to his ability, to each according to his needs!". To get to that point what had to happen is that "all the springs of co-operative wealth flow more abundantly" and only then can bourgeois right be overcome. It has been said on many occasions that Stallman's biggest hack is reuse of regime of copyright to ensure sharing in public sphere i.e. to ensure opposite of what was intended with the creation of copyright. Could we not say that, in a similar fashion, Stallman's use of concept of rights – which, as Marx so vividly explains, maintain the economic differences and ensure that structure (names of capitalists can change) of economic inequalities in society persists – was also a hack? Core principle in the normal functioning of the regime of rights on which capitalism thrives is right on property. Stallman re-conceptualized the idea of rights to encourage volunteer, co-operative and decommodified society with the notion of shared wealth. Can we read openness to participation of Free Software as a step towards society where one contributes according to one's abilities (from each according to his ability)? Equally, can we read the availability of software in public sphere that Free Software ensures as a step towards society where

one will be able to take what one needs (to each according to his needs)? Since software is a form of wealth, is not sharing of software built in cooperation an act which ensures that "springs of co-operative wealth flow more abundantly"? In short, is not reuse of concept of rights another hack of anti-egalitarian, anti-democratic liberal-capitalism by Richard Stallman, a hack in the spirit of communism as imagined by Marx?

6 Free Software and academia

What are the possible consequences/uses of Free Software for academia? Let's read academia through Free Software, for a change.

To start with, why should the artifacts of academia not be available for sharing? They are also a product of creative work, indeed, and thus fall under Stallman's category of the most valuable contribution to society. How does a digital copy of text, or sound, or video differ from code? In terms of engagement with the material, code gets edited, parts get reused, parts rejected. The product of academic production, other than education for students, is vast amounts of written and audio materials (it is common for student to record a lecture in digital audio). Yet, not only that all that gets locked up within universities, but it is rare that it is shared amongst students. One could argue that utility of such material is an entirely different kind, since not every lecture is necessarily considered good enough by the lecturer for wider distribution. However, given the number of students doing audio recordings those days, distribution of material is no longer in the hands of academics. It could well prove to be that all it lacks is someone as determined as Richard Stallman,

or indeed, any other axiomatic revolutionary, who will position his/her truth in terms of fidelity to the event, in the sense of Badiou's reading of Paul.

Why is the Open University the only university with an intense focus on audio and video material and online educational tools? Why are their materials available only to those who can commit to pay for it? Once materials have been produced, given the existing level of ownership of personal computers throughout Western society, the price of their digital reproduction is close to zero. Also, if the Open University can do it, so could others, especially given that others can learn from Open University's experiences in the production, management and use of digital learning materials. Yet, despite the existing pioneer model of the Open University, and the largely state-financed production of educational materials, access to them remains closed in internal campus networks and online journals. Those journals have been one of the most frustrating issues I have faced during the past three years of my undergraduate education.

Each university subscribes to online journals. Students get access only to those journals to which their university has subscribed too. In practice, given the amount of academic publishing, students get access to tiny fraction of what is relevant. If the student has multidisciplinary interests, the result is even worse, since universities only subscribe to a selection of journals that match their departments. How is this relevant to Free Software? Most authors publishing in academic journals do not get paid for what they publish. Many of them also edit the same journals without pay too. In other words, most of them are volunteers. What they get instead is increased potential for future employment and future earnings as writers. The same applies to Free Software programmers; with every job they do as volunteers, future earnings in the form of employment

opportunities, get increased. With the exception of publicly funded projects, programmers do this work in their own spare time. In the case of academia, roughly speaking, it is a combination of the two: some writing and journal editing is done as part of academic employment while the rest is one during private time. One significant difference is that Free Software creates a body of public software that is today widely used worldwide, reducing the cost of computing. With academia, most of the volunteer work, some of which it is already funded by the public and by current students, is enclosed in online databases of journals. The cost of individual articles is rarely less than the cost of an entire expensive new book, which means that buying any of these is out of the question. No one buys them. The cost is there to prevent individual access and enforce institutional subscriptions only. How did this come about? Volunteerism and publicly paid work of academics benefit large corporate publishing companies, while students and citizens of states who to a large extent pay for it are denied access to the vast majority of it. Academics are not in a much better position though, since they share the destiny of their students, with equally poor access, and must settle for any benefits that this might bring to their career. Given that it is difficult to find a job in academia without publishing in such journals, the choice that academics have isn't really a choice, if they want to work in academia. Volunteer contribution to corporate publishers resembles a mandatory welfare program for private wealth that everyone has to take part in. Closed access journals are a form of privatization by proxy, where the level of corruption of public funds depends on set of economic parameters: the level of public funding and the amount of journals published by the university, which do bring some funds back (Taylor and Ruiz III, 2007). Although there are some initiatives for publicly funded knowledge to be accessible to the

public (for Taxpayer Access, 2007), for open access to knowledge in general (iCommons summit, 2006), even for open access to publicly funded data (Guardian newspaper initiative from 2006), the most interesting development is in the practice of peer reviewed open access journals (of Open Access Journals", 2007), an attempt to maintain the filtering that academia provides with the benefit of easy online publishing provided by the new generation of on-line publishing tools. An initiative that came out of meeting in Budapest in 2001 stated that they were inspired by the Free Software movement's practices and the availability of the software tools it provides (Initiative, 2007).

In parallel with the rise of Free Software, on the fringes of academia, substantial criticism of the regime of intellectual property has arisen. Liang (2004) has elaborated many points on how the existing legal framework of knowledge and culture only came into existence with the rise of global capitalism, primarily in twentieth century. One of his claims is that, contrary to its original purpose of striking a balance between the public interest and an incentive for authors to create, today's regime has arisen in order to prevent, not promote, creativity and invention. These are not radical claims any more, and certainly not on the fringes of academia only. Recently, some of the more mainstream parts of academia have been asking why the situation of culture, knowledge and the sciences developed into such a strict legal regime. For Sackville (2007: 34), it is because the economic well-being of some groups in society depends on the privatization of resources. In this case, he claims, it is intellectual resources that have been under the attack of groups who are well resourced, organized and have powerful lobbying mechanisms, direct access to both national governments and the formation of international treaties. This echoes the findings of a long anthropological and historical research study by Drahos (2006) who sought to understand the reasons why governments in many states worldwide were adopting copyright and patent laws, when there was no understanding of the advantage[22] those laws will bring to their economies. The field work for this study took place over a period of several years in many cities in Europe, USA and Asia, but four cities, Washington, New York, Brussels and Geneva, emerged as the centres of decision-making and policy-making. According to Drahos, it was a highly centralized, well planned assault on wealth that was until that time not considered to be private. Imperialism of knowledge met with little or no resistance. Networks of corporate lobbyists have linked the intellectual property regime with the trade regime. Recommendations to governments by private commissioned consulting bodies often get translated into marching orders. He concludes with the obvious: "Knowledge capitalism cares more about its mode of production and monopoly profits than it does about producing low cost medicines for the poor in developing countries.". Drahos' research shows the negative influence on the world that Western assault of imposition of patents and copyright is having. How can then Free Software, a movement battling for the opposite, for sharing of intellectual wealth, a movement which inspired and enabled other movements with similar goals (open access in academia), not be political, regardless of what free software programmers might claim?

7 Conclusions

In our neo-liberal times, Free Software is a rare secular return of thinking beyond the accountants' spreadsheets. It is a return to an affirmative, axiomatic, belief in thinking about society as one. It divides – as in its sharply defined and defended division between free and non-free software – in order to unite in a volunteer, co-operative society.

Free Software is a hack of not just the regime of copyright, but of the concept of equal rights as well. Some of its goals are the goals that Marx has set in his vision of communist society. Yet, the Open Source Initiative was formed by a part of the hacker community to re-package and sell the idea of Free Software stripped of its radicalism to the richest corporations in the world. The sociology of hackers and Free Software has been predominantly unashamedly liberal, which isn't a problem. The problem starts when such ideological positions are interwoven with theory without reflection on how those political commitments, affect the theory itself, its coordinates, its possible and "impossible" outcomes. Part of this unspoken political commitment is that work of Max Weber has been used extensively in various analyses of hackers and Free Software, yet, it is not insights found across his work that have been used, but his most known final conclusion alone. From a communist, egalitarian, anarchist, anti-capitalist and anti-meritocratic stance, Free Software has hardly been theorized at all. It has been idealized, and for such idealizations criticised (Rossiter, 2006). The work of Alain Badiou offers a way to read Free Software as an egalitarian revolutionary act. The book published in 1999 by O'Reilly, in which creators of Open Source coalition wrote about their work, was named "Open Sources: Voices from the Revolution". For them, revolution was in making the world largest corporations invest in and buy into the concept of Free Software stripped of its radicalism. The correct name for such a book should have been Voices from the Coup. This is where the line of division lies. Social theory, so far, has seemed to be able to avoid reflection on this division. Yet, it is only by insisting on this division that radical egalitarian potential of Free Software can be rendered visible.

Most of the books and texts written by academics have already been paid for, with their salaries, at least in Europe, coming from the state budget. Why is this material in vast majority of cases confined to closed university networks for current students only? How come academics, whilst being paid by the state, work for free for publishers, publishers who in many cases (especially when it comes to journals) hardly do any work, yet who collect the money from books and subscriptions to journals? Although the raging EU battle for mandatory Open Access for all government funded research has been well documented (Poynder, 2007), given that a large part of all academic books is also written on the time paid for by public education funds, we should extend the demand for open access to such works too. These are some of outstanding issues related to academia that theory and practice of Free Software raises. It is to be hoped that these questions will be addressed in the near future. However, it seems to me that it is only an act as axiomatic, egalitarian and divisive as that of Richard Stallman, and fidelity to the event that gives birth to such an act, in Badiou's sense, that can antagonise these issues to the extent that they can no longer be ignored.

If we are to agree that democratic process is a process of subjects who "reconfigure the distributions of the public and the private", who challenge the privatization based on birth, wealth and 'competence', privatization guarded by the police and the State (Ranciere, 2006: 61-2); if we are to agree that this process can not be identified with juridico-political forms, because such forms always refer to the people, to incompetents (p.54) – Ranciere reminds us that capitalist parliamentary regimes couldn't justify themselves if they didn't refer to the people who vote and thus 'choose' those who rule and legislate on their behalf – it follows that peer-to-peer networks could be seen as such, democratic, processes. Here's how a definition of Free Drugs, another possible process of reconfiguration of the public and the private, could be inherited from Free Software:

- The freedom to use the drug, for any purpose (freedom 0).

- The freedom to study how the drug works, and adapt it to your needs (freedom 1). Access to the drug recipe (blueprint) and acceptance through regulated clinical trials are preconditions for this.

- The freedom to redistribute copies of the drug and its recipe (blueprint) so you can help your neighbour (freedom 2).

- The freedom to improve the drug, and release your improvements to the public, so that the whole community benefits (freedom 3). Access to the drug recipe (blueprint) and acceptance through regulated clinical trials are preconditions for this.

Notes

[1]Up to date statistics on some aspects of this are at http://news.netcraft.com

[2]A group of influential social actors in UK have been using Free Software as an example of how production and innovation can be increased with a model that differs from the predominant one focused on conceptualization of new types of property, private ownership of that new property and its protection by widening and strengthening the law that applies to it (copyright and patents). See Adelphi charter website that shows some of the tensions between the multiplicity of actors/demands for the change in this predominant increase in property and law and actual workings of the national (UK) and supra-national (EU) institutional frameworks of governance

[3]Hacker's manifesto (Wark, 2004) deserves inclusion in this research, but because of its complexity and vast amount of attention it needs, it is too large for this occasion.

[4]German Chaos Computer Club, one of the most known and active network of hacker's clubs in the world, added to those points in 1980's two more: g) don't litter other people's data; h) make public data available, protect private data (Club, 2007)

[5]Notable exception to this that comes to mind quickly is London based small publisher Mute whose imprint *Mute vol 2* has been last few years consistently publishing essays on Free Software related subjects while resisting opportunistic short cuts.

[6]Although not directly related to hackers and computing, Celia Lury's work (1993: chap.2) offers some riskier and more useful insights into the some of the core issues for the world of hackers, namely lack of pattern, predictability in production of art and the difficulty of fully commodifying art under capitalism, and the reproducibility of art through technology.

[7]Throughout the book, Weber showed how diverse protestant branches, sects, are, and how careful one has to be when linking Protestantism with capitalism. Yet, he nevertheless does it, shielding himself, in the beginning of the conclusive chapter of the book, called *Asceticism and the spirit of capitalism*, with the remark: "For the purposes of this chapter, though by no means for all purposes, we can treat ascetic Protestantism as a single whole." (Weber, 1965: 36)

[8]Several issues central to debates on intriguing aspects of hackers and Free Software, especially those related to organization of human groups engaged in production, are central points of Weber's work (Weber, 1964).

[9]See http://www.oekonux.org/

[10]In The Revenge of the Hackers, Eric Raymond talks about Open Source goals: "Our success after Netscape would depend on replacing the negative FSF stereotypes with positive stereotypes of our own–pragmatic tales, sweet to managers' and investors' ears, of higher reliability and lower cost and better features. In conventional marketing terms, our job was to re-brand the product, and build its reputation into one the corporate world would hasten to buy." (DiBona et al., 1999)

[11]Recent Demos report has six references to the Open Source, and zero to the Free Software. (Gallagher Niamh, 2007)

[12]Lack of understanding of the difference between Open Source and Free Software is best seen when in one of the masterpieces of recent social theory term "open-source" is referenced with the "Free as in Freedom" book

on Stallman (Negri and Hardt, 2004: 300)

[13]Their conferences, books, lobbying were, are, at the heart of the Open Source movement. Their attempts to explain the logic behind their activism are still without serious theoretical reflection. For example, in *Open Source and the Commoditization of Software*, we can learn from Ian Murdoch, founder of Debian, one of the most important and popular distributions of Linux, that "standardization, and thus commodification, are both natural market forces as well as key events in human history" (DiBona et al., 2005)!

[14]The source code is blueprint written in a computer programming language, from which computer applications are assembled.

[15]See file called CodingStyle in the Linux kernel v1.3.53 from the 1995, also available at http://www.linuxhq.com/kernel/

[16]One about which text editor is better to use, Vi or Emacs, is one of the best known religious wars amongst hackers.

[17]Quote is available at http://briandeer.com/social/thatcher-society.htm

[18]See http://claire3.free.fr as an example of striving for elegance in programming language design.

[19]The most consistent reporting on this has been by french monthly newspaper Le Monde Diplomatique. For example, Halimi (2002) provides a short history of neo-liberal victory to become a world dominant ideology, while Cassen (2005) explains why voting "NO" in the past French referendum for the new EU constitution would not be a bad thing.

[20]Indymedia is a network of alter-globalization collectives and websites based on the principle of open publishing.

[21]Steep rise in the number of patents granted and submitted in USA since 1980 is visible from the official state statistics (USA Patent and Trademark Office, 2006).

[22]Goldstein (1994) provides a good overview of history of copyright in USA and UK, and makes clear who its original beneficiaries were. See the chapter *History of an idea*.

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