

“Political Motives of Developers for Collaboration on GNU/Linux”, Version 1.0

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Abstract: This paper examines to what degree developers of GNU/Linux are politically motivated for their contributions. It argues for the political significance of Free Software/Open Source Software (FS/OSS) and discusses the developers ambivalent attitude towards a politicisation of FS/OSS. Centrepiece is a survey carried out with 85 GNU/Linux developers the results of which will be outlined in this paper.

Introduction – Why This Research?

This paper is concerned with computer programmers who develop Free Software / Open Source Software (FS/OSS) and in particular with those who take part in the development of GNU/Linux. The main question of this paper is whether the developers of GNU/Linux do attribute a political significance to FS/OSS and if so, whether they see their programming contributions as a deliberate act of political action or whether there are no greater social ideas connected to their work.

For this text I want to use a very broad definition of politics that understands it as:

“the activity through which people make, preserve and amend the general rules under which they live.”

Heywood (2002: 21-22)

In the context of this work I am interested in whether the creation of GNU/Linux and related FS/OSS can actually be perceived as a political action that is an expression of a particular set of political ideas of GNU/Linux programmers.

To start with, I certainly have to explain why one should care at all about the motivation of developers – especially their potential political one. Obviously the author does believe it to be important and so we start looking into this topic by assessing what has been said and written about it so far. Famous protagonists of the community have something to say about FS/OSS and politics and even though very little, there has been done some research on the topic. To get to

grips with an assessment of developer's political attitudes I will introduce the reader to a survey I carried out and the basic results of which will be outlined.

The Political Relevance of FS/OSS or Why It Is Important to Look Beyond the Coding

Why should one care at all about the attitude of FS/OSS developers towards their work? First of all I argue that software is of political relevance because of its crucial interface function in a world in which digital technology has such a prominent position. Furthermore, software is relevant because the very nature of it embodies the challenges the political system faces from digital entities as a whole. In this context software is understood not only as code but also as standards for data formats and data exchange protocols.

To understand the crucial interface function of software one simply has to acknowledge the rise of information and communication technologies in general. The second half of the 20th century saw a global restructuring of capitalism with a general reorientation towards a more flexible organisation. Information has become a prime value in modern capitalist societies as the finance sector unmistakably illustrates. That leads Castells (2000: 17) to assert a new mode of development: after Fordism and Taylorism it is now *Informationalism*, which is characterised by the “*action of knowledge upon knowledge itself as the main source of productivity.*”

This whole transition relies on the capabilities of modern ICTs – and what is often forgotten: ICTs would not exist on this scale without the globalising capital as well. However, none of these electronic devices that permeate our life today would be useful without a piece of software in it that controls its functions. Software constitutes the interface between us humans and the powerful machines that play such an important role in our life. As Zimmermann argues:

“In this function software structures the economic and social options open to people in everyday working life.”

Zimmermann (2004: 12)

However, obviously the impact of software is ubiquitous and not limited to the working environment. The ways in which software is produced and distributed and what kind of usage of it is allowed, define to a large degree how a society is communicating and interacting. Just think of the World Wide Web: Where would we be today if Tim Berners-Lee had not decided to put the standards in the public domain? The structuring potential of software becomes even more evident if one thinks of Digital Rights Management (DRM) – here clearly the software intervenes massively into people's lives and their potential to act.

Yet the political significance of software arises not only out of its function but also out of the very nature of software itself as it poses a challenge to established assumptions of production and ownership. If we understand “*technology as an expression of human creativity*” (Youngs, 2001:382), then software is this human creativity in its purest form. There is nothing material, nothing tangible to disguise the idea. It is for this reason that in software code

there is embodied the whole problematic of our legal and political systems to deal with digital entities in general – be it music, books or any other kind of digitalised information. The ongoing discussions about how to regulate the electronic sphere indicate that a policy for the digital realm including ways to deal with software and its social implications, has still to be found.

Originating in the programming sphere itself, FS/OSS offers a concept of how to produce, distribute and use software. In addition to the factors outlined already, FS/OSS is of special relevance to politics because this concept is in discrepancy to established forms of production and ownership. As different authors (Holtgrewe, 2004; Tuomi, 2002) have pointed out, the FS/OSS model represents a technological as well as a social innovation. On the technology side, the FS/OSS-programmers have not only created a number of software products that are seen by many people as superior to proprietary alternatives. They also managed to technically facilitate the large scale cooperation of people spread over the whole world. However, the social innovation is that these people actually work together to produce (and most of the time give away for free) a product that huge companies are used to charge for. They did not only introduce basic principles of scientific collaboration into software production, but also a new approach to ownership which is based on the premise that no one should own the source code and that is protected by suitable licenses which enable and encourage the distributed collaborative production of volunteers.

The ideas connected and hopes inscribed to the FS/OSS model depend very much on which of the both innovations is valued more. For economic actors the technical merits are most important and they are looking for a way to incorporate this development model. The social implications of a collaborative production of open code are therefore more an unintended consequence than a desired objective. On the other hand, the FS/OSS model has gained a lot of proponents from alternative movements. For critics of capitalism, the technical innovation is only a proof that alternative methods of production and exchange are possible, fuelling expectations on the FS/OSS model as a counter concept to a capitalist society (Meretz, 2000). So it is no wonder that the collective action and the produced software have found friends among a lot of – mostly left-wing - political activists as Riemens (2003) highlights. What is more, the open development process of FS/OSS has already been applied in many areas that go beyond software – from an encyclopaedia like Wikipedia to drug development like the Drugs for Neglected Diseases Initiative.

Another dimension to the political significance of FS/OSS is the option of technological empowerment that it offers developing countries. As Gosh (2004) points out, both the FS/OSS software and the development model are highly attractive to countries that are struggling to build up their IT infrastructure. FS/OSS offers an ideal opportunity to obtain high value software at low costs and build an IT infrastructure while respecting intellectual property rights. Other reasons are the open standards and the high adaptability of FS/OSS, making it possible to produce a localized version of the software for markets that are not profitable for big software vendors. Furthermore it helps to develop the IT skills of local people and enables them to participate in global software development.

Opinions in the Community

By acknowledging the political significance of software and FS/OSS in particular the important role developers play becomes important: Who could have a more qualified opinion than this highly educated elite which is able to cope with the demands of a world in which information and its management is of prime importance? They can be expected to understand its structure and inner workings so their opinion can be considered to be an informed one and should have momentum.

If we have a glance at the history of computer programming, quickly two contrasting findings become eminent: there has always been a political or subcultural notion to computer programmers, often in connection to hackers in its positive (Levy, 1984) as well as its negative perception. On the other hand, there is the stereotype of the geek or microslave, who is not interested in anything but its computer (same with the hackers) and who does not care for the freedom of information (different from the hackers). This ambivalence to politics is still visible in the community. So to get to grips with an assessment of developers' political motivations for taking part in the production of FS/OSS, I will at first have a look at some loud voices of the community.

It's All About Politics

No one can engage seriously with FS/OSS and miss the gospel of St. IGNUcius. Concerning a political approach to FS/OSS, the Free Software Foundation (FSF) along with its founder Richard Stallman represents clearly and openly the political end of the opinion spectrum. While the people participating in the FSF are often highly skilled and value good code, Free Software was and still is about much more than creating software. As Stallman puts it:

"[...] speaking for the free software movement, I talk about issues of ethics, and what kind of a society we want to live in, what makes for a good society, as well as practical, material benefits. They're both important. That's the free software movement."

Stallman (2001: 167)

The FSF states that no one should actually own a program. While they see economic disadvantages in the use of proprietary software, the main argument against proprietary software is a social one. The evil of copyright would be that it destroys people's solidarity, the ability 'to help your neighbour', by prohibiting modifying and copying programs.

In fact, the people of the Free Software movement extend the idea of sharing software beyond the pure technical issue to a general question about the basic values of our society. One can clearly identify political claims in the philosophy of the FSF, claims that are very much based on the libertarian ideas Stallman identifies himself with and that are informed by the hacker ethic, as is illustrated by the emphasis that is placed on the *freedom* of the user by preserving the users' rights and not restricting him. The GNU software therefore is one means of transporting a political idea.

“Even if GNU had no technical advantage [...], it would have a social advantage, allowing users to cooperate, and an ethical advantage, respecting the user's freedom.”

Stallman (2002a: 22)

But what kind of political idea is the FSF promoting? While Stallman was criticising big corporations that relentlessly pursued their profit to the disadvantage of the people, his libertarian belief is not anti-corporate or anti-capitalistic (even if his critics often connect him to communism). What Stallman and the Free Software movement are not denying is the fact that a programmer should be paid, but not for the software itself but for the work he or she is putting in it. It is therefore totally acceptable to charge money for free software as the FSF in fact does. What is more, the freedom of free software also leaves total freedom to use it for any commercial purpose, including for example military ones as has already happened (Slashdot.org, 01.03.2003). So in this sense the ideas of the FSF might not have that much in common with for example the ones of globalization critics that promote and use FS/OSS.

Politics? No, thank you, I'm just an engineer.

The founding fathers of the Free Software idea were and still are clearly motivated by more than just hacking. However, this political engagement is by no means shared or even welcomed by the whole community. The rejection of a politicization of Free Software went so far, that in 1998 the Open Source Initiative was founded in what was essentially an attempt to establish an apolitical alternative to the Free Software movement. Co-founder Eric S. Raymond sums up the main reasons:

“It seemed clear to us in retrospect that the term “free software” had done our movement tremendous damage over the years. Part of this stemmed from the well-known “free-speech/free-beer” ambiguity. Most of it came from something worse – the strong association of the term “free software” with hostility to intellectual property rights, communism, and other ideas hardly likely to endear themselves to an MIS manager.”

Eric S. Raymond (1998b: 212)

The Open Source Initiative was eminently a try to make the movement more attractive to business by putting emphasis on the openness and common production of the source code and by disengaging with many of the ideas that went further than that. The OSI is less interested in the social implications of FS/OSS but sees economic disadvantages in the use of proprietary software as it prevents the software from being used and developed in the best and most effective way. The OSI is promoting the bazaar-style development as it was used for the Linux-kernel while not making too many claims about the kind of software that should be the result. Therefore the FSF claims:

“Open source is a development methodology; free software is a social movement.”

Stallman (2002b: 55)

An apolitical approach to FS/OSS is also purported by no one less than the major publicly prominent figure of the movement, Linux initiator Linus Torvalds:

"I think of myself as an engineer, not as a visionary or "big thinker". I don't have any lofty goals. I just want to have fun making the best damn operating system I can."

Torvalds (in Diamond, 2003)

What the Academia Has to Say

What could the academia gain from it so far? In recent years there has been a notable increase in research on FS/OSS. However, many projects are inspired especially by the wish to try to understand how to best incorporate the open development model into businesses or how to organize such projects most effectively. While there is some research on motivations, this did not focus on political explanations for developers engagement with FS/OSS.

There are many authors that argue that the foundation of the OSI is just one sign of a deeply in the community embedded concern about a politicisation of the work of the developers. In fact, there are several authors who assert that the majority of the developers is simply centred around the technology they are producing rather than its social benefit. Hannemyr argues that

"[...] the hacker's fascination with technology is not because they believe that technology will bring about great and revolutionary changes (or make any societal difference whatsoever). Hackers love technology for its own sake."

Hannemyr (1999)

The earlier quote of Linus Torvalds nicely underlines Hannemyr's assessment. Coleman (forthcoming: 7) offers some reasons for this rejection of politics. Basically, programmers have a very scientific approach to FS/OSS as they believe that any not purely rational decision could spoil the quality of the code. Equally important it is argued that championing certain political ideas would diminish the freedom of others and also prevent them from participating in the project. In fact, the purported neutrality of FS/OSS has enabled its wide application across a variety of diverse backgrounds – from counter-cultural groups like Indymedia to world-class capitalist businesses such as IBM. One of the more often voiced opinions is that the politic approach to FS/OSS happens to be on the user's, not the developer's side (Riemens, 2003) although such a distinction is quite difficult to make in an environment in which basically every user can become a developer too.

Several surveys on the motivation of FS/OSS developers have come up with the finding that – even for voluntary programmers - FS/OSS offers a lot of personal benefits, first and foremost to do something they enjoy: programming. A survey of Lakhani et al. (BCG/OSTG, 2002) with about 700 selected participants observed that intellectual stimulation or enjoyment is the main motivator of

programming. Other authors as well emphasize that contribution to FS/OSS has by no means to be altruistic, as developers get something back for their contributions, for example in the form of other software code or simply professional experience.

However, that hackers participate in FS/OSS out of personal reasons can hardly be surprising and is by no means immoral. The question is simply whether the reasons for participation stop at the personal benefit or if there is something more beyond. Indeed, while many surveys find that programmers participate in FS/OSS projects for their personal benefit, it also shows that another big share is held by motivations which cannot (or not completely) be explained by the pursuit of a personal benefit. Among the often named non-selfish motivations are sharing knowledge, a demand for non-proprietary code and to limit the power of large software companies (Ghosh et al, 2002).

Furthermore, even hardcore “no-politics” evangelists like OSI co-founder Eric S. Raymond admit that the community as a whole has been increasingly active to lobby the political arena due to governmental proposals of tougher communications or software regulations. There is a growing understanding of source code as speech hence source code should by law be secured under the constitutional guaranteed freedom of expression, an argumentation that for example the FSF is promoting.

The claims made by the community have already led some authors to attribute FS/OSS the status of a social movement. In his analysis, Zimmermann (2004) asserts FS/OSS developers a certain degree of organization, a collective identity (around hacking values) and actions that are aimed at a profound social change in society. Another finding of Coleman and Hill is, that while most developers do not have political or ethical reasons to join the community, through participation and discussion among their fellow hackers they come to value the principle of free software as well as its validity for other realms of life:

“The technical success of free software projects and the personal gains from participation jointly reinforce the hacker belief in openness and information sharing with relevance and applicability in other domains of social and political life.”

Coleman and Hill (forthcoming, p. 280)

Coleman also argues that even while promoting an apolitical approach to FS/OSS, developers are in effect championing deeply liberal views which is quite easily recognizable in the emphasis on freedom. So there often is a political notion to claims about FS/OSS – namely a liberal or even libertarian one – that goes mostly unrecognised by the developers who declare themselves to be apolitical.

What this summary shows is that so far it has been difficult for the academia to get to grips with an assessment of FS/OSS developers political attitudes. Reasons for this can be seen in the openness of the community that enables a vast diversity of interests and opinions to take part. Furthermore, when trying to assess the role politics plays for FS/OSS developers, it is important to acknowledge that the digital sphere in which programming takes place, is different from the traditional public sphere and that subsequently the definitions we used to have for political participation might not be suitable to

register the actions of computer programmers in terms of their political/social objective. We might not get too far if we simply look for signs of traditional forms of political participation such as party identification, protest action or public manifestations. That the culture of FS/OSS exists in the virtual worlds of electronic communication networks does not mean that its impact would not be real. A first clue can be the hacker ethic as Levy has written it down, that also states: "*Computers can change your life for the better*" (Levy, 1994: 45). The first hackers gave their successor on the way a firm belief in modern technologies as a force for the good. So FS/OSS developers' aims for society do not directly translate into political action in a form we would expect. Rather they are mediated by technology as they are pursued mostly in a technological realm and promote certain technologies as a means to achieve a certain social behaviour.

The Survey

Despite the number of studies that are concerned with FS/OSS developers and their motivations, there has not yet been a study that focused on political explanations for developers' motivation. The research project that will be introduced below and that was carried out in the context of a Master dissertation was a small scale attempt to close this gap. The questions that it hoped to answer were how developers assess FS/OSS in terms of their political relevance and whether they are at least in parts politically motivated for their collaboration.

I decided to carry out a survey to achieve the necessary data. Therefore an electronic self-completion questionnaire was put online to which developers were invited via announcement on relevant mailing lists or message boards¹. To limit the scope, this survey was interested in people who are taking part in the development of GNU/Linux, so relevant mailing lists were GNU/Linux distribution websites.

Although a completely randomly selected sample would have been desirable, this was impossible to achieve. Apart from this, as has already been discussed, poorer countries have special incentives for the use of GNU/Linux, and to get the views of developers from these countries I deliberately tried to contact GNU/Linux distribution projects that were initiated there. Finally data was collected during the time of 15th to 24th June. During this time 85 developers from 10 out of 23 contacted projects responded.

The sample could validate what previous studies have shown already: The average FS/OSS programmer is male, in his twenties and most often lives in an urban area in Europe or North America. He has an above-average education and works or studies in a Computer Science related field. The only difference to previous studies has been the comparatively high share of developers from low or medium income countries with about 20% of the sample due to the deliberate decision to include more of them in the survey. About 40% of the respondents were paid to develop FS/OSS. Due to the young age structure the average involvement with FS/OSS is 4.5 years. The big majority has taken part

1 You can access the questionnaire and take part in the survey at: <http://www.chronovault.net/websites/tobi/researchID>, user name and password: linuxtag

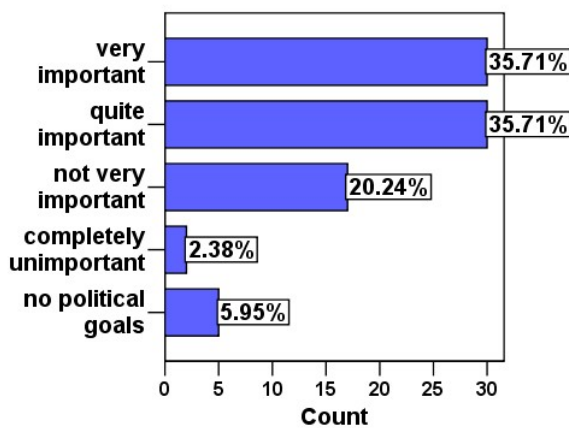
in no more than ten projects.

Findings

High Overall Political Motivation

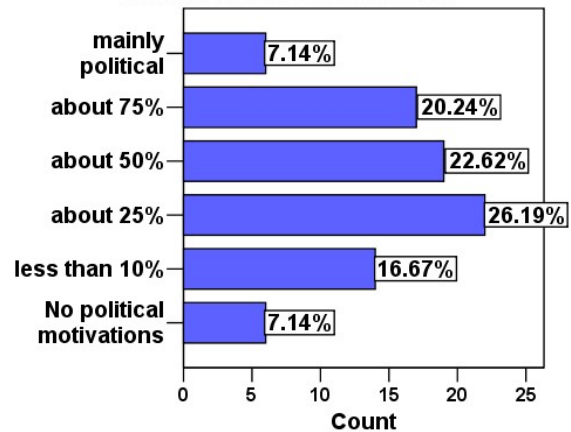
One of the major findings of this survey has been that by and far the majority of the sample sees political goals of FS/OSS and has at least some motivation for their contribution to GNU/Linux that they would term political. About 70% of the respondents said, the political goals of FS/OSS would be quite or very important. Roughly the same number sees their contribution at least partly politically motivated.

Importance of Political Goals of FS/OSS



Graph 1: Importance of Political Goals. (84)

Share of Political Motivations for FS/OSS Contribution



Graph 2: Political Motivation. (84)

The findings are supported by statements of respondents such as this one:

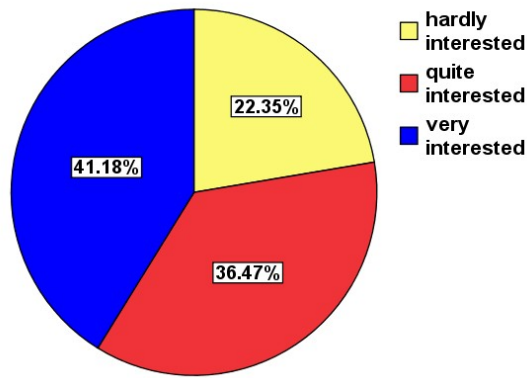
“the world is presently divided into haves and have nots. i think floss is a great equalizer”

However, in accordance to mentioned previous studies it could also be confirmed that there exists a diversity of other motivations for contribution to FS/OSS projects. Personal reasons like gaining knowledge and enjoying to write software make for a big share of motivations of the respondents. What has been surprisingly unimportant was the desire for reputation among peers – or at least that has been the self-assessment of the respondents.

High General Political Interest Both Online and Offline

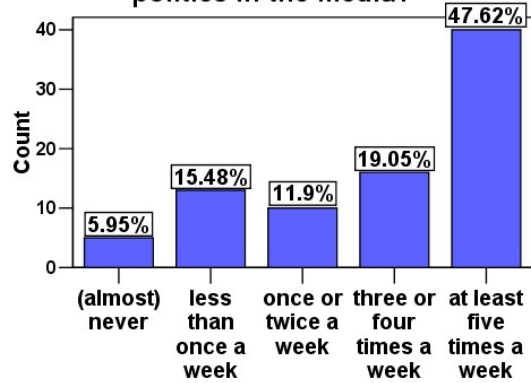
The second important result of this survey has been that the stereotype of the geek who is not interested in anything than his computer, is wrong. In fact, the survey shows the GNU/Linux developers of this sample are more often than not interested in politics in general and have been politically active in form of protests or signing a petition for example both in the real world as well as online. The main source for political actions has been protest against software patents but the reasons for action have not been limited to that.

How interested are you in politics in general?



Graph 3: Political Interest. (85)

How often do you access news about politics in the media?



Graph 4: Political News Access. (84)

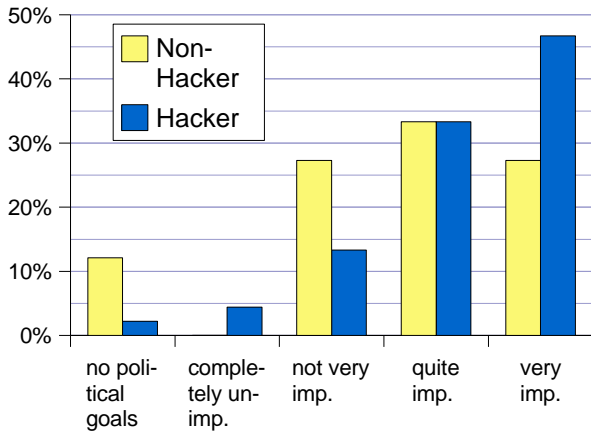
While developers who cared about politics in general were also very much politically motivated, the same is not necessarily true the other way around. I could find some signs for a difference in online and offline behaviour in terms of developers being very interested and active around FS/OSS as a political issue without taking care too much of traditional forms of politics.

Characterising Political Developers

So what makes for a political developer? What distinguishes him from his fellows who simply code for the sake of it? Surprisingly, it is not the issues you would expect to make a difference. Significant differences in attitudes cannot be found between developers who are paid for producing FS/OSS and who do it voluntarily. One reason for this homogeneity might be that most of the programmers deliberately look for a job where they can code FS/OSS and they have to be forced by their employer to do so. Furthermore, there are little observable differences between champions of either the Free Software or the Open Source Software movement. This seems to be an expression of the decreasing importance of this distinction, although there are some strong feelings about each other. Finally, also developers from low and medium income countries do not differ very much from their high-income country counterparts in their assessment of FS/OSS.

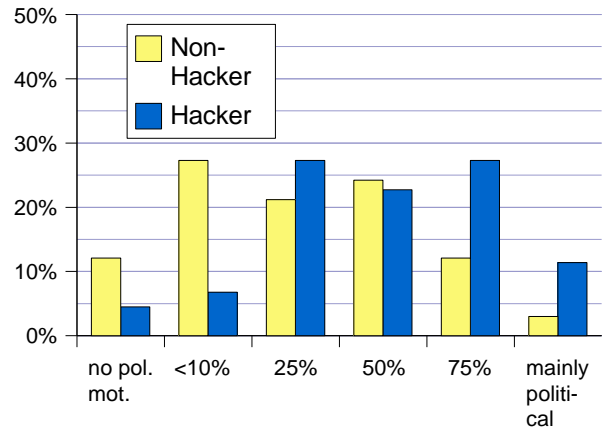
What the survey could find was a significant difference in the attitude of developers whose opinions are in accordance to the hacker ethic and the ones whose are not. In this survey, programmers who very much approved of the statements “All information should be accessible to everyone.” and “Generally, software should not be proprietary” were classified as hackers according to the hacker ethic as Levy (1984) has been proposing it. What the graphs are showing is that this group of developers is much more motivated by politics than the other group.

Hacker by Importance of Political Goals



Graph 5: Political Goals by Hacker. (77)

Hacker by Share of Political Motivation



Graph 6: Political Motivation by Hacker.(78)

The commitment to the traditional hacker values plays the decisive role in how developers assess FS/OSS in terms of its political relevance. This distinction is also visible in the readiness for political action both on- and offline. However, there are also signs that there is a distinction between the traditional public and the electronic sphere: Although the hackers are significantly more politicised about FS/OSS, interest in politics in general does not differ from their fellow programmers.

Views of FS/OSS Developers

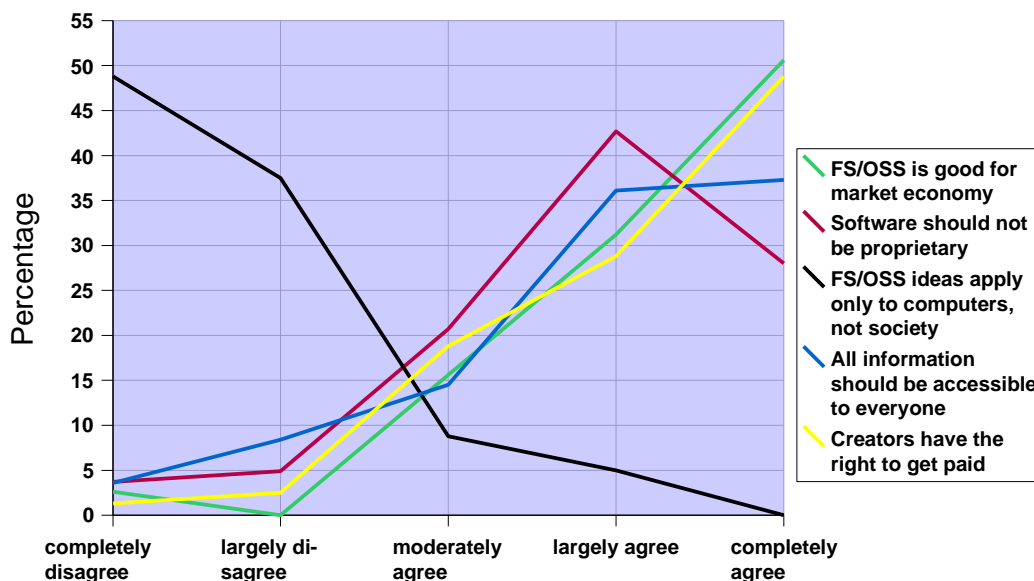
This research has shown that for the majority of the developers in this sample political motivations play a role for their involvement in FS/OSS. Yet it is not clear what kind of ideas the programmers connect to it. The question is if their ideas are in line with some of the more radical proponents of FS/OSS like the Indymedia activist who said:

“Earlier, someone said that [Indymedia] is a revolutionary project, and free software is a revolutionary tool for it.”

Coleman and Hill, 2004

The following graph shows the distribution of respondents' agreements with several statements concerning some political opinions about FS/OSS.

Developer's Views on Political Issues



Graph 7: Political Views.

It might be a revolutionary tool but rather not in terms of a revolutionary change of society. The large share of the sample does seem to see FS/OSS and free market capitalism as compatible.

Also revealing is a look at the aims stated for the protest actions developers took part in: While there is a variety of different aims like gender equality, gay rights and opposition to the war in Iraq, the majority of the actions (offline, 58%; online 67%) was related to FS/OSS, in particular software patents. So as political actors the developers are very much focused on their own community. However, I think it would be wrong to assume that these political efforts are undertaken solely out of selfish motives and for the sake of the technology. Rather I would see it at least partly as an attempt to secure an idea and a technology that is considered to be beneficial for society. This argument is also supported by the fact that the majority of respondents think that FS/OSS ideas do apply to society in general, not only to the computer realm.

This survey could only tap a bit into the pool of political opinions of FS/OSS developers and so one cannot infer too many conclusion from it. Although only little relevant data could be gathered concerning the nature of developers' political ideas, I think it became obvious that FS/OSS developers cannot necessarily be considered as politically radical or as serious critics of the present capitalistic society, in what ever way FS/OSS and GNU/Linux in particular might be perceived by non-developers. Yet, as was discussed earlier, the concepts of FS/OSS are clearly alternative and this survey shows that the respondents are convinced of their applicability to society. Just it is difficult to answer from the data how a society that incorporates the principles of FS/OSS should look like. What is more, I believe that probably the developers themselves do not have an exact idea of this alternative society, a fact which I would by and large attribute to the programmer's belief in practical work being more beneficial than theoretical discussion.²

² Of course due to the nature of this paper only the major results could be presented here. For a more detailed account of the findings, please refer to the website.

Conclusion

"We have a great OS here, and even greater ideals behind it."

This quote of one respondent wraps up many of the results of this research in one short sentence. While there is on the one hand the appreciation of the technology of "a great OS" along with all the practical benefits that come together with its collaborative production such as learning and fun in programming, for the majority of the developers in this sample there is something *even greater* beyond the technology: *ideals*. The results of this survey reject the thesis of a vastly apolitical community of FS/OSS programmers. On the contrary, the majority of the developers in this sample obtain a considerable motivation for their work out of the fact that they attribute FS/OSS a political significance. Underlining this general political understanding of FS/OSS is the finding that the majority of the respondents believes that the ideas of the community are applicable to society in general, not only to the realm of computers. What is more, their convictions also induce them to take action both online and in "the real world", especially if they see their community and their ideas threatened as was (and still is) the case with software patents for instance. The survey could also observe a high general interest in traditional forms of politics that are usually accompanied by a high FS/OSS politicisation, but as was shown, a highly political motivation for FS/OSS is not dependent on a general political interest.

In this sense the online and offline world are separated, the politicisation in and for the technological realm being higher than for traditional forms of politics.

One might be surprised to learn that it is neither simply the volunteers in contrast to the paid developers who attribute special importance to the political goals of the community, nor the developers from low/medium income countries with special incentives for the use of FS/OSS. Instead the most politicised in their work with FS/OSS are the developers who can be considered as hackers in the definition according to the hacker ethic. If any, this survey showed that the self-assessment of the hackers is extremely different from how they are typically thought of by the public: as asocial computer geeks or even worse – criminals.

An understanding of software as more than just a technical entity is considered to be important because in this work I made the case for the profound importance of software for society and the important implications that arise out of the use and distribution it allows. I argued that developers play an important role in defining these implications both as actual creators of software as well as informed citizens of an information-centred society. Furthermore, I attributed FS/OSS particular political relevance as it challenges established assumptions about production and property, for which it has already been embraced by various actors with political connotations. In contrast to some authors who see the politicisation of this kind of software solely originating in the objectives of its users, I would argue that the survey showed that the developers themselves politicise FS/OSS. Despite of this, those political activists who see FS/OSS as a means for a post-capitalist society that emphasizes collaboration and sharing, will be disappointed: the little data on political opinions this survey could gather does not point in the direction of revolutionary or counter-cultural opinions among the developers, as expressed in the finding that most

respondents see FS/OSS as a component of a free market economy rather than as an alternative to it.

On the other hand, I also argued that hackers have a very special approach to politics that mediates political ideas and participation through technology. This approach itself and the results it might yield could be much more radical than the developers themselves are actually aware of. In this issue I see the connecting point for continuing research: What I think is crucial for future studies is to further examine the political views developers connect to FS/OSS.

The question that remains to be answered is in how far the results of this survey can be applied to the whole community. Clearly the findings cannot be said to be valid for the overall population as the selection of the respondents did not happen randomly and the sample size is too small, especially if we consider the discussed diversity of motivations for contribution. Furthermore, this survey focused on a certain group of developers who collaborate on GNU/Linux distributions. On the other hand, the demographic characteristics of the sample correspond mainly to the ones found in much bigger studies. However, even if we allow for a biased sample as the survey might have attracted more politically interested developers, these political developers are part of the community and with them are their *even greater ideals*. At least these people prove everyone wrong who would state that FS/OSS developers are completely apolitical. But I do not think that even the big majority is apolitical. One major finding of this survey is that the hacker values play an important role in the politicisation of the community. Who adheres to them is likely to see his or her work as more than just a technical activity. These values have formed the roots of the Free Software movement and they have endured in the community despite a growing popularity of its ideas that attracted the most contrasting contributors (think of IBM and Indymedia). I can think of nothing that would prevent the hacker ethic from its further existence, so that it might live on in the community and with it a socially responsible approach to computer programming.

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