# FREE SOFTWARE AND HUMAN RIGHTS

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## 1. Introduction

Human rights warm the heart. People are urged on in the name of human rights to create a sense of meaning in their lives. Technology does not do this: it seems to suggest calm, flight from anything alarming.

I work in the field of Development Cooperation and the perspective I come from is that of the world's South. The background to my activity is the pressure coming from globalization, a phenomenon that sees both economy and technology as key players (internationalization of markets on the one hand and the spread of computer networks on the other). However, I note with amazement that it is only the economy that is being condemned by those who oppose globalization (the so-called *no-globals*) while, peculiarly, the ICTs seem sheltered from all criticism, in a kind of presumed "neutrality". Language, too, is revealing: the adjective "new", with its constant semantic load of euphoria and hope, seems restricted to information technologies, while others, for example biotechnologies, are pointed to contemptuously as "deviant technologies".

A serious reflection on the relationship between technology and rights, and in particular between Free Software and human rights, suffers from this basic distortion typical of recent years. There was a time when technology gave rise to international debates; it is enough to recall the lively discussions in the 60's and 70's on *appropriate technologies* or *collaborative tools*. Today instead an optimistic indifference prevails, a kind of blind trust in the virtues of technology. In 2003 we witnessed the paradox of a UN Summit on the Information Society quite overlooked by the information media itself.

On the other hand, there is a well-versed niche group of enthusiasts, in general the FLOSS community, which refuses to accept a dominant technological determinism and which glimpses a strategic option in every technological choice replete with social and political relationships. Their attention is directed especially to software, possibly the most refined product of human ingenuity, in order to underline its great potential but also its inevitable risks. The computer, whose 'nervous system' is provided by software, is beginning to exercise control in the world where human beings interact, and on democratic processes as well as economic ones. There is no relationship or transaction in cyberspace which is not spelt out in some way by software code. Software is by now a part of rights and law as a regulator in the real world and no longer limits itself, within the realm of cyberspace, to being a functional equivalent of law.

Nevertheless, while the use of software in our daily lives continues to be an object of investigation for the participatory potential it offers and for its role in creating identity and community, rather less investigated are policies which are thought out and implemented in reference to questions like access to

technologies and the rights implied.

Amongst the reasons for this of course is the fact that the relevant decisions are often taken in places far from where the citizens are and that the way these decision-making mechanisms function is often quite opaque. There is also poor understanding of the language adopted by policy makers, often too bureaucratic and jargon-filled: the documents they produce are only interpretable by engineers and 'legal eagles'. The experience of the last few years demonstrates how dangerous it is to delegate technical issues to specialists: we end up also delegating the protection of our rights.

Which rights and how they are tied in with software, is the subject of the following reflection.

# 2. Digital rights

The International Covenant on Economic, Social and Cultural Rights contains one article recognizing the right of everyone "*to enjoy the benefits of scientific progress and its applications*" and inviting States to take measures for "*the conservation, development and diffusion of science and culture*", respecting the "*freedom indispensable for scientific research and creative activity*" (art. 15). This guarantee, it is evident, applies perfectly to software which, before being a technology, represents knowledge in its pure state, the product of the creative activity of human ingenuity. Promoting this specific human right, therefore, also imples "freeing" software.

Many, not satisfied with this way of formulating things, are trying to set out sui generis human rights around software. There is an ever more frequent reference to "*digital rights*", generally located within the so-called "third generation human rights", those which are claimed at a period following on from the traditional set of human rights. The term "digital rights" is not accepted univocally, and is generally a reference to rights made necessary by technological and info-tech developments: this has brought a request for new freedoms aimed at older forms of power, for example:

- the *right to protection of privacy* against intrusive information technology;
- the *right to security* in one's transactions;
- the *right to access* to information technology resources.

The deabte over the first two rights (privacy and security) has in fact monopolized public discussion, and it is not difficult to understand why. In fact we are dealing here with two rights tied strictly to the individual sphere, which public opinion is traditionally more sensitive to. And we are dealing, besides, with rights which are typical of the more advanced nations, with a widely-developed network of information technology resources and the software required to make use of them.

Rather more complex is the debate on the right of access to information technology resources. This debate is almost completely absent in the world's North, and has been taken up in recent years by the United Nations in favour of nations in the South. There is enormous publicity around the theme of the Digital Divide: it seems that the international community has by now reached a deep consensus on the need to reduce this as soon as possible.

The most popular slogan seems to be that of "access". The idea is that the most urgent task for the poorest nations is to "have access" to the information society and the solution almost always offered is to provide them with information technology infrastructure. International organizations habitually employ the term "*e-readiness*" to refer to provision of infrastructure to a country, and implicitly they mean that once there has been catch-up in these infrastructures, a country can be said to be "ready" to enter the digital world.

The ideological values in this slogan are evident, a product of linguistic colonization by neo-liberal discourse. This considers information as a market-place, thus attributing monetary value to it, something to be sold and exchanged. As a consequence, access to information is treated as if it were access to any kind of market. Information ceases to be the fruit of a process of interaction and becomes a market product for commercial exchange. It becomes something which one can have more or less access to, so long as somebody makes it possible. Should we wonder then if, in the name of intellectual property, the information incorporated into software is made artifically scarce?

Those excluded from this commercial exchange are not seen as victims of the violation of human rights. They are defined rather as "*info-poor*", a new category needing help from technological handouts.

In studies on human rights there has been a shift of attention from the concept of the individual seen as the object of charity, assistance handouts, to a rather more mature concept of the individual as someone with needs and rights which are to be actively promoted. It is evident that the info-poor have to be interpreted from a wider perspective, in the light of the political, economic and social context. The right of access to information must necessarily translate into an ability to promote, exchange, improve information for the individual and the community he or she is a part of.

# 3. Software and the Right to Development

Amongst all the human rights, the one most pertinent to Free Software is the so-called "Right to Development". We are talking of a third generation human right, recently become relevant. It belongs to the category of so-called "*solidarity rights*" (along with the right to the environment, peace, artistic heritage), which imply a social and collective dimension for the enjoyment of a common good. The traditional dualistic scheme of individual – State, belonging to the classic subjective personal rights, now becomes inadequate: they can be satisfied for the individual's benefit only inasmuch as they can be at the same time satisfied for the benefit of the community which the individual belongs to.

The frame of reference here is human development, as expressed by the United Nations:

> "*"human development" is the process which determines a broadening of opportunities available to the people and an enabling of human abilities*"

The reflection which gave rise to the idea of human development emerged over a very long historical period, beginning with acknowledgement of the failure of the theory of economic growth and the need to attribute importance to other dimensions of the process of development. The inspirational father of this theory, the Indian economist Amartya Sen, claims that the concepts of development and wellbeing have to go beyond simple possession of goods or the availability of services: they are certainly a means to achieving wellbeing but are not, of themselves, an indicator of wellbeing. We need to look elsewhere: what can people achieve and be through using the means and caabilities at their disposition? What range of possibilities and important objectives of human life is accessible to them?

Those who support Free Software maintain that what they have created is a formidable engine for human development. Nevertheless, in holding up its strategic importance for countries of the South, they appear to highlight only its economic advantages.

In the first place, they maintain that this software does not require huge production infrastructure: it is not necessary to set up huge factories and there are no ecological implications. Earning margins are higher than 85%, a much higher figure than for any traditional industry. Not a few commentators are convinced that countries of the South have a chance to completely avoid building huge industrial

plants, a phase that has been characteristic of development in western countries.

Secondly, software is a strategically important sector, in that its production is tied not so much to physical capital, but to investment in human resources. One element never lacking in developing nations is precisely the availability of human resources which, once there is adequate instruction and education, provide a decisive impulse for inserting these respective nations into the world of the economy. One can add that software development can be taught in a relatively simple way: in western countries it is certianly not unusual to find adolescents who are capable of achieving a good level of programming ability.

To these advantages, typical of software in general, one can add the more specific advantages of Free Software. Countries of the South, for the most part, have good intellectual resources but little capital and, already having a number of obselete machines, lack the resources for proprietary operating systems. Also, thanks to the open and cooperative nature of FLOSS programming, it is easier to involve local programmers in adapting and developing software: it would be superfluous to say that this contributes enormously to promoting the local ICT sector. Free Software also satisfies sustainability requirements, inasmuch as the typical open licence guarantees that the benefits will also be produced in the future.

In small ways, but quite decisively, applications founded on open standards are spreading around the world. Many nations are turning to Free Software to develop their own local software industry; others are doing so as a matter of national pride; others still for security reasons. Whatever the reason a nation turns to Free Software, there is no doubt that the result is line with the theory of human development: an increase in available opportunities, not opportunities offered by the market but those determined by the expanding of human capabilities and functions.

## 4. Software and the Right to Communication

The Right to Communication is one of the topics most debated in civil liberties discussions within the digital world. Its supporters often make reference to art. 19 of the International Declaration on Civil and Political Rights, which says: "*each individual has the right to freedom of expression; (…) this right includes freedom to (...) seek, receive and impart information and ideas through any media and regardless of frontiers*".

The claim to a right to communication is generally accompanied by discussions relating to topics like: the right to confidentiality, intellectual property, freedom of expression. With regard to Free Software, there is no doubt that it better safeguards the right to confidentiality; and free of the burdens of intellectual property, it offers broader space for creative expression. These are topics broadly explored by the FLOSS community, but almost always in an individual sense. The huge lacuna is the community context in which these freedoms are exercised, as also the cultural aspect. The virtual world is not, as often thought, an indistinct mass of content mixing around chaotically, which we need to have access to. Rather is it like a network of people who communicate and exchange information: the means they employ is always linguistic.

Few people are aware that the rapid spread of Free Software in the world owes much to a linguistic misunderstanding. In 1992 Microsoft introduced software programs into China coded in Chinese. Somewhat clumsily, however, they were written in characters used in pre-revolutionary China, today only employed in Taiwan. The Peoples Republic of China, which in 1949 adopted a new writing system,took offence at the fact that such an important decision would have been taken by the United States without involving locals. The relationships between Microsoft and the Chinese authorities became somewhat problematic, and rapidly deteriorated in subsequent years. Maybe as a consequence

of these events China decided to move in the direction of open source operating systems, thereby excluding the world leader in this field from the world's greatest potential market. This experience demonstrates how an apparently banal technical decision was able to take on a political and cultural significance that could not have been foreseen and which then led to economic repercussions.

The open source community, over these years, has produced a lot of software in local languages, even offering smaller populations, therefore ones less appealing to the world market, the possibility of using software in their own language. In many cases, unfortunately, localization is limited to translation, and for the rest, localized software tends to reproduce functions and setups already found in the best known proprietary software, maybe thinking that this is the best way to get them adopted and spread.

*Localization*, in realty, is a much more delicate process of adaptation than simply translation. It requires a profound ability on the part of the programmer, to adpat his or her creations to the user's culture, of which language is but one expression. We can think, for example, of how much attention needs to be paid to the choice of icons, an essential component of modern operating systems. Or we can think of the language of colour: while red means "stop" or "danger" in western countries, it can mean "life" or "hope" in other cultures. Another example comes from writing systems: alphabet or characters, the direction in which they are written, the way dates are written or calendars understood, the search processes used by the dictionaries incorporated into programs. They appear to be only technical problems but in fact can end up impeding authentic communication.

Another problem strictly tied to localization is *linguistic standardization*. The FLOSS community generally experiences ambiguous and not all that infrequently conflicting relationships with the community that concerns itself with standardization, due to the commercial implications brought by standardization. Undue attention to this aspect can have disastrous effects. In India, for example, both the Indian government and the info-tech businesses have failed in their efforts to create a standard which is universally shared by Indian languages, and to build a localized software which makes use of such a standard. The lack of a univocal coding standard has made internet search in Hindi quite impossible if we want to use a common search engine like Google. Yet it is surprising that you can search in a language like Estonian, spoken by no more than a million and a half people, but not Hindi, with a billion speakers.

# 5. Software and the Right to Education

The typical educational value of Free Software has meant that from the outset its use has been linked to the Right to Education. For many years United Nations bodies, UNESCO in particular, have produced reports pushing the potential of new didactic technologies, e-learning in particular, with a view to raising the level of human development. A greater access to education and an improvement in the quality and flexibility of educational services are amongst the features most often quoted in the many international congresses.

One of the arguments most frequently used is that didactic technologies free the student from his/her place of learning, making effective learning processes potentially possible for everyone even where schools or formal structures are lacking.

In realty, one of the most difficult myths to break down is that cyberspace is considered to be a "deterritorialized" world. Even if the encounter between teacher and student takes place in a virtual and non-material place, the learning process is always part of a precise territorial dimension given the cultural background of the student.

A computer program is never presented as a culturally neutral tool, able to resolve problems of a universal nature: there are always, sometimes evident but often hidden, some typical cultural connotations from the social environment of origin which, in another culture, can seem strange or different. These show up in the kind of hypotheses formulated by those working on computer programs, regarding the abilities and expectations of the users. A cultural imbalance of the kind is less evident in the case of maths or statistics programs, but really comes to the fore in the case of didactic programs which lend themselves more to cultural ambiguities.

The problems can arise from an incorrect interpretation of metaphors used of the ethical implications tied to a program's basic aims. One example is the style found in many computer games produced by United States software, not appreciated by places like India and China, where schools are much more orientated to the content aspect of final exams. Another example is the rigid subdivision of the functionality of some European software which reserves certain creative functions exclusively to the teacher. A limitation of this kind seems socially acceptable in countries where the teacher's authority is not normally under discussion, for example southern Europe, but it is not the same in places like Scandinavia, where it might be seen as curbing the creative potential of the student. In general, it is ever more the case that the didactic software in use is a copy of software from the country where it was first produced or that it is translated with little thought to adapting it to local culture.

E-learning does not escape from this problem, and often faces the criticism of being a cultural expression of countries from the North, inappropriate for developing countries. This brings into play the underlying value structures in didactic planning, which tends to highlight individualist features. It seems to suppose that a distnace-learning student is more autnonomous, more capable of being responsible for learning tasks that he himself identifies. It simply forces us to highlight the inadequacy of this model in cases of countries and traditions where autonomous thinking is not encouraged, nor decision-making, and where it is normal to think of the younger generations as beholden to the elders. Cultures like this appear to be moving in a direction contrary to the requirements and expectations being asked of the distance-learning students.

Maybe it is necessary to give much more serious thought to the paradox whereby Free Software, coming out of a communal and collaborative phenomenon, has not been able to fully free itself of the individualistic roots of its western origins.

# 6. What kind of freedom

There is no doubt that the dominant ethic of the Free Software movement is an ethic of freedom. As such it regards norms and regulations with suspicion, seeing them as unduly restricitive. The GNU licence was thought up as a kind of anti-licence, as the minimum of regulation necessary to gurantee the perpetuation of the freedoms it upholds. But are the freedoms laid down in the fourfold statement (freedom to execute a program, freedom to study it, freedom to redistribute it, freedom to adapt it) really sufficient to guarantee, into the future, free and unconditioned access to the resources of information technology?

An example could be useful to better illustrate this doubt. Let's consider the best known of the products developed through open standards, the internet. It is shown as an example of the excellence achievable by freely sharing resources and informatiion. The internet grew out of the socio-cognitive interaction of millions of people, machines and programs, through an uninterrupted process of self-organization, made possible through sharing a transparent protocol for transferring information.

The internet was certainly born free. But have we any guarantee that it will continue to be so? There are

already some alarm bells ringing today. We are too accustomed to thinking of the "huge web" as the very symbol of freedom and democracy to note that many governments, far from the mirror of public opinion, have already turned their gaze on the web, seeking to curb its growing protagonism. Examples of censorship by many authoritarian governments in the South of the world are the order of the day, as well as the hidden interferences of many western governments.

Also with regard to the internet the idea of decentralization is often used as a surrogate symbolic of democracy. A decentralized web has been presented to us over a long period, a whole complex of nodes without a centre or a periphery. But the idea of an internet egalitarian in structure, able to escape external control and pressures, is but a myth. In realty, the internet is managed in a way that is quite the opposite to anarchic and is increasingly showing up a battlground of huge power interests.

The worldwide structure of the internet is not a territory which cares for itself and is without check: there are varous bodies which, each with its own distinct tasks, controls its functiioning. The most delicate area is the management of web domains. Whoever manages the structure of internet addresses in fact wields formidable power over the economy and strategic world resources. Some domains allow for the development of economic activities and to act as a reference for social activities; others take on a precise political significance (think of the web domain suffix .ps for Palestinian sites, assigning to the occupied territories an independence in cyberspace that they do not yet have in the physical world).

ICANN (Internet Corporation for Assigned Names and Numbers) is the institution presiding over the registration of domains: it could be likened to a virtual control tower, able to direct computers. If it ceased to function, the net would be in a situaion similar to an airport where the control tower was without radar. In brief it holds power of life or death over the entire web: that's not bad for a body which is not all that old and whose existence many are ignorant of.

ICANN, which came into being with the idea of being fully representative of all centres of interest and internet users, currently offers no guarantee of being fully democractic. Based in California, operating in formal terms by contract with the North American Government, bureaucractically administered and made up of members strongly influenced by a handful of large corporations, up till now has not guaranteed transparency in its decision-making, which for the most part takes place behind closed doors.

Today, after a long standstill, the international community has returned to a discussion of ICANN's future, in the name of internet *governance* . The American Government has gone on the attack and has claimed that ICANN is an integral part of American national interests. On the other hand, a group of influential nations, amongst which are Brazil, South Africa, India and China, are pressuring for a shift of the ICANN's delicate tasks to a super partes body, like the UN.

This solution, nevertheless, does not convince many, especially in Europe. On the one hand there are doubts based on whether a UN institution would be any more straightforward and less bureaucratic than ICANN itself. On the other hand there is a fear that national governments might take precedence in managing a resource which up till now they have only been able to partly control. It seems more than obvious to everyone that China is attempting to take control ina way that will allow it to exercise a more rigid and overall censureship of its own internet.

Whatever choice is put in place in terms of regulation will strongly mark the internet's evolution and the maintining or not of the freedom which has thus far been characteristic of it. It is really a pity that, in this debate, the FLOSS community's voice is so markedly absent.

# 7. Conclusions

In recent times requests have multiplied for a "Digital Rights Charter", supporting the urgency of this. Free Software supporters are often int he front ranks of those asking for this. The more pessimistic claim that we run the risk of seeing "digital human rights" spelt out and approved only as a repsonse to some technological web disaster. The analogy, evidently, is with the emergence of the Declaration on Human Rights, which arose out of the horrors of the Second World War.

In my view, a new rights charter would be useful only if it were able to arouse renewed attention to the problem of freedom on the web and associated software rights. The claiming of such rights would necessarily have a superindividual dimension (referring to "*rights of persons in community*") and should give priority to political and cultural contexts where software is created or brought and the needs of the poorer populations. It is in the world's South that we see the most serious violations of the right to benefit from the information created in cyberspace.

Cyberspace is not autnomous, separate from society, but reflects the values and prerogatives of concrete reality, with the same risks that unsustainable development models have had. We can trace a parallel between the emergence of cyberspace in the development debate and the sphere of rights on the one hand and the emergence of the concept of sustainable development on the other. Sustainable development, which came from the area of natural sciences, has given new value to the idea of the sustainability of the management of natural resources and extended it to the entire economic and social process.

We need to look at cyberspace in exactly the same way: it presupposes extending to the the world of information the principles that preside over human and sustainable development. In this case the resource needing to be managed is information which, like the environment, is a renewable resource, capable of being reproduced. It is also a resource which needs ot be protected, respected, preserved and valued in order to be available to everyone.

"Sustainable information", as we could call this new development thread, is the bearer of an information ethic capable of resolving the challenges coming from this new environment, avoiding all kinds of destructione, corruption, pollution or unjustified closing down of cyberspace. It has to remain a public space, accessible to all, iwhere collaboration can flourish, consistent with the application of civil rights, legal requirements and the fundamental freedoms demanded by the information society.

Thus like natural capital it comes into reflection on development, becoming one of the limiting factors in economic growth, and so information capital ought guide technological growth in an ethical sense. Just as the environmental factor has restored universality and given impetus to the theory of human development, so the "information" factor, understood as a global public good, can determine the birth of a more equitable information society.

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