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# Ethics of Information Technologies in Knowledge Society

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How should we define the ethics of information technology? It is not a new field of study in the sense that it requires an entirely new ethical thinking. Rather, it is a field where we can try to use our traditional philosophical notions and apply them to this field of computer technology, information science, and knowledge society in order to define responsibility and accountability. Although relations of causalities may be blurred and complex because of the auto-poetic development of computers and information systems we may still have to face the fact that human beings are fundamentally responsible behind the responsibilities of the computers. So we can say that the concept of reliability and accountability is related to human responsibility in the field of Internet technology. Indeed, issues of hacking, viruses and intervention in computers also pose the problems of responsibility and violation of property and copyrights and here we face similar issues as when we talk about physical property rights although what happens is going on in cyberspace. Also we face fundamental problems about transparency, power and democracy of society as the result of the information revolution in knowledge. This shows how it becomes more and more difficult for governments and organizations to hide information and that information is becoming more and more public. We can also talk about the present development as a technology-driven information revolution in knowledge society. The information overload is a result of this revolution that is expressed in the Internet and that changes the relation of human beings to society where human beings need to access information technology and tools in order to be able to live and work in society.

*Keywords:* ethics, information technologies, communication, knowlegde, society, social responsibility, business ethics

## Introduction

In this paper the author will present the major ethical issues that we experience on the Internet. Here we can say that information technology ethics or computer ethics is a development of ethical theory that also involve social ethics, political ethics and business ethics. We can distinguish between what is right and wrong in itself and what is legally permitted and what is ethically sound but not legally permitted.

The ethics of information technology relates to fundamental issues of society and this is indicated by what Richard de George calls fundamental themes of information technologies. He distinguishes between: “The myth of amoral computing and information technology”, “The lure of the technological imperative”, the “Danger of the hidden superstructure”, and the “acceptance of technological inertia” (De George, 2003). These themes relate to the fact that we have to deal with the ethics of information technology and also that we have the possibility to handle these issues and present important solutions to the problems of the ethics of information technologies. So we can say that the concept of reliability and accountability is related to human

responsibility in the field of Internet technology. Indeed, issues of hacking, viruses and intervention in computers also poses problems of responsibility and violation of property and copyrights and here we face similar issues as when we talk about physical property rights although what happens is going on in cyberspace.

### **Ethical Theories and Principles**

When we talk about ethical theory and ethical principles we can focus on the link between Internet technology, information technology and the economic market. Accordingly, we can propose ethical theory and principles as related to a modern Internet economy where information technology becomes the center of the Internet economy (Rendtorff & Kemp, 2000; Kemp, Rendtorff, & Mattsson, 2000; Rendtorff, 2009, 2014a, 2014b, 2014c).

The most important ethical principles that should be respected to foster the good life of the customer, we argue, are the four ethical principles of autonomy, dignity, integrity and vulnerability as the basis for fair treatment of stakeholders. These principles can be applied with great success to understand the ethical concerns of Internet, as the author have proposed elsewhere together with Peter Kemp (Rendtorff & Kemp, 2000; Rendtorff, 2009) autonomy is an ideal of self-determination and self-legislation. Dignity should not be reduced to autonomy and refers to basic principles of human rights. Integrity accounts for the inviolability of the human being. Although originally a virtue of uncorrupted character, expressing uprightness, honesty and good intentions, it has, like dignity, been universalized as a quality of the person as such. Vulnerability concerns integrity as a basic principle for respect for and protection of human and non-human life. It expresses the condition of all life as able to be hurt, wounded and killed. The idea of the protection of vulnerability can therefore create a bridge between moral strangers in a pluralistic society, and respect for vulnerability should be essential to strategic decisions in corporations and policy making in the modern welfare state.

### **The Ethical Challenge of the Internet**

#### **The Problem of Searching on the Web**

The Internet is a new type of technological creation that expresses the essence of technology. The Internet is not a technology that is useful for a particular purpose (Dreyfus, 2001). It is a technology that is the culmination of the idea of technology as making everything as flexible as it is possible: The Internet is the perfect technology that gives us access to every other kind of technology. What characterizes the Internet technology is the lack of bodily engagement and the fact that Internet users transcend their bodily relations to the world. They live in the electronic world that is nowhere and not where our bodies are. Cyberspace is a place of knowledge beyond the human body that we research in order to get knowledge. Like real Platonians we leave our physical world and enter into the world of ideas. When we enter into cyberspace we realize the vision of Plato and Socrates that we die in our bodies and enter into the space of ideas (Dreyfus, 2001, 2004; Mattéi, 2013). In contrast to this Nietzsche argues that human beings are bodily beings and the Platonic vision of the world is bound to fail, because we become sub-humans that have no relation to our bodily intuitions when we leave our local, vulnerable, situated, bodily self and enter into cyberspace.

When we talk about the ethical challenge of the Internet we can formulate it as the challenge of perfect information and artificial intelligence and we can include the problem of the loss of our bodily relation with the world (Dreyfus, 2001, 2004; Mattéi, 2013). There is an element of absence in the presence of information technology. The body is the source of our feeling of being in touch with reality (Dreyfus, 2001, 2004; Mattéi,

2013). With the constant engagement with the Internet we lose our connection with the reality of things and human beings. Since the meaningful life presupposes real duty and devotion and real risk the anonymity and security of the Internet lead us to a life without meaning.

Information is organized by the help of hyperlink (Dreyfus, 2001). The relation between class and elements is no longer the organizing principle but rather mutual relations between different elements. Hyperlinks make a connection between each data place. Having database with hyperlinks the author can go across a large number of information and jump between different kinds of information.

It becomes difficult to use the concepts of *data retrieval* for information retrieval in a deep sense. Data retrieval searches for specific data based on names or numbers while *information retrieval* goes much deeper (Dreyfus, 2001, 2004; Mattéi, 2013). Data retrieval is a direct search for a specific answer with correctness as criteria of success while information retrieval is a search for knowledge about a specific topic and meaning and use of this topic and here the extension of the about of available information is a problem because the author do not have the time to search all this information.

There is a fallacy of *abundance*, as suggested by Hubert Dreyfus, is that we have to face when we make a search on the Internet. That is the problem that the fact that we may find good documents on the Internet we think that the Internet works very well, but what about all the documents and information that is not revealed to us (Dreyfus, 2001). In earlier search machines the revealed documents were listed according to the relation between words and documents, but researcher state that this gives only 10% probability that the real useful documents will be revealed (Dreyfus, 2001).

The danger is that it is difficult to find documents with real relevance in cyberspace. The relevance of documents disappears because we do not have real human beings to evaluate the relevance of specific documents. In our real world life is organized for us as bodily incarnated active human beings and not of computers that are not bodily incarnated beings. Human beings that leave their bodily understanding will have much more difficulties using web crawlers to get information (Dreyfus, 2001, 2004; Mattéi, 2013).

### **The Challenge of Distant Learning**

With the increased focus on distant learning on the Internet in our times we can say that we have reached a situation of hyper-learning where everybody can come to learn about everything everywhere. In schools and universities we experience a lot of focus on e-learning as a new method of learning in our times (Dreyfus, 2001). We also have many Internet systems developed at schools in order to connect teachers with the parents and the pupils in the schools. There is however, a problem with e-learning, it is not enough to give pure facts to pupils they also need to learn the meaning and the context of application of what they learn, so it is difficult to make initial stages of a learning process fundamentally based on e-learning. So we cannot have distant learning without human presence. Maybe tele-presence can solve the problem but it is still important to remember the importance of bodily incarnation for learning of practical wisdom.

### **Un-bodily Tele-presence and Distant Reality**

The idea is that the social network creates a new form of human interdependence and relation that goes beyond the present social relations. We have experienced that the Internet is everywhere. And we will see that the Internet appears as an invisible ocean where everybody swims and that we cannot live without (Dreyfus, 2001, 2004; Mattéi, 2013). The metaphor of the network expresses how the Internet makes everybody connected in a new and important way. The problem is how does this affect our concept of reality and our

relation to the outer space and what do we lose when we only relate to each other by the means of technology?

We experience the world as a distant spectator in this context. However, there is a problem because if an experience of reality in order to be real needs to have the aspect of engaged action then the experience of the world of the Internet is not real in the sense of bodily engaged phenomenology. It is rather the same experience as someone who experiences the world as the captain of a spaceship or as the experience that we have of the world in interactive robot control. With interactive robot control we have immediate contact with reality. Here we are in immediate contact with the things that we manipulate.

Merleau-Ponty argues that human beings have a need to have a fundamental grip of the world so that we feel that we experience things in their unity so that we have visibility and unity and encounter with the world where I exist in the unity with the world (Dreyfus, 2001). Interaction between human beings and machines would according to this point of view never be the same as the interaction between human beings with the close bodily encounter. Human bodily presence in the perspective of phenomenology remains a primordial relation that cannot be replaced by the relation between human beings with the mediation of machines that is proposed by cyberspace.

### **Nihilism and Information Highway: Anonymity and Engagement in Cyberspace**

The Danish philosopher Søren Kierkegaard said that modern times were characterized by a distant reflection and curiosity where everything was annihilated and where nothing had real importance (Dreyfus, 2001, 2004). Nietzsche called the spirit of modern time's nihilism. Kierkegaard was very critical in front of the press that he considered made the genuine relation to Christianity impossible. Why? (Dreyfus, 2001, 2004). Kierkegaard criticized the audience or the spectator of the modern democracy and the reader of the press by the fact that they were passive. They had not a real engagement. It was an audience that was passively participating in the activities of society and therefore they were not to be considered as congregation, a society, a corporation or a community rather they were isolated elements of mass-society. Kierkegaard saw the press as the demoralization of human beings because everything could be criticized endlessly and therefore nobody would act (Dreyfus, 2001, 2004).

The problem for Kierkegaard is that there is no deep relation to the world left. What people then do is that they engage aesthetically in the world. He calls this the aesthetical sphere of existence where the life of surfing on the net has become a life-form for the net-surfer. The net-surfer is always looking for interesting sites at the net, but this happens in a cool and detached way. The net-surfer is always ready to go on to another website that seems to be more interesting. Life has become a life of being an anonymous spectator at distance without any engagement in the world that the individual encounters on the Internet (Dreyfus, 2001, 2004).

In this sense we can say that the net-surfer experiences a change of identity at the Internet. What happens is a change of identity where we experience ourselves as floating, emergent, decentralized, polycentric, flexible and always in movement. We can say that the Internet is an experiment of construction of the post-modern subject.

This is for example the case what happens when we see the construction of human subjectivity in chat-rooms and in the social Medias of face book, u-tube and twitter. Here we see the construction of human beings with many faces and identities and identity is constructed by the self-exposure on the website with small details from daily life. We experience exposure society on the Internet with the emergence of exposure as important for the construction of individuality. We can say that the web is a producer of an idea of an authentic individuality that goes beyond the individuality of the bodily life of the self (Dreyfus, 2001, 2004).

However, according to the existentialist philosophy of Kierkegaard this exposure of the self on the Internet remains an inauthentic form of existence, because there is no deepness of the self. Kierkegaard argues that the aesthetic form of existence remains a form of existence that is inauthentic and impossible to live. It is impossible to make a distinction between what is trivial and what is important so this kind of life would lead to despair for the one who searches a meaning in the life on cyberspace. The life of the cyberspace surfer would lead to a life of inauthentic anonymity and lack of engagement and this would ultimately lead to despair according to Kierkegaard.

At another level Kierkegaard speaks about the ethical form of existence. At this level the self has a stable identity and the self engages in action. Information is not used for play and surf but for serious purposes (Dreyfus, 2001, 2004). At this level the collection of information can have a serious purpose when it is not an end in itself. We would according to Kierkegaard argue that the use of the Internet for many good purposes, e.g., interests groups, political groups, groups wanting to save the world etc. would contribute to give the Internet important purposes for human lives. Accordingly, one has to use the Internet in a way that gives life importance and engages the individual for this importance. It is the choice between good and evil on the Internet that makes the individual capable of engaging in meaningful activities by using the Internet. According to Kierkegaard ethical action is determined by decision of an ethical choice and this is important for engagement.

However, it is not enough to choose ethically. Kierkegaard argues that we have to go beyond the ethical state towards an unconditional obligation or demand that moves us from the ethical towards the religious sphere of existence. At this state we go beyond the hyper-flexibility of the aesthetical state and the unbound freedom at the ethical state towards the feeling of obligation and commitment to fundamental values and it is this fundamental commitment that can save us from nihilism and the aesthetic attitude in relation to the World Wide Web.

### **Facebook, Cyberspace and the Meaning of Life**

A very good example of our existential problems of the Internet following the thoughts of Kierkegaard is the development of face-book as an example of how human existence is changing with World Wide Web is the emergence of facebook as the place of human self-fulfillment. The problem is whether facebook is a new figure of ideality, belief and reason like rational systems of reason or religion or whether the exploitation of knowledge at facebook reminds us about our finitude and our limits? In fact, it seems like facebook becomes real life where we want to present us in an ideal Platonic sense, far from our bodily reality. But here we see the problem of the Internet.

Maybe we experience the limits of our existence with facebook where we have to face that human beings are not created to capture and navigate in all that information that is provided by digital media. In fact facebook reminds us about our finitude. We are finite human beings that meet our own limits at facebook. We experience a strong challenge to our finite existence when we face the infinite at facebook. But facing the infinite at facebook, the question becomes a challenge to our finite existence and we face the limits of our existence as a digital human being. Accordingly, We are in danger in losing ourselves. We think that facebook provides us with perfection without our active intervention, but there is no meaning in facebook. It is a way for us to capture eternity through our infinite exposure, but we forget that life is in our finite existence outside the many “likes” at facebook. But this is an idealization of our bodily corporeal existence, where authenticity, as suggested by Sartre is “not to be what you are, and to be what you are not”.

### **Ethical Issues of Information Technologies**

What are then the concrete ethical issues that we face when we deal with the Internet? What is an ethical relation to cyberspace? How can we become conscious and responsible users of Internet technology without losing ourselves? Have we already moved from aesthetics to ethics with all the possibilities of cyberspace 2.0, i.e., social media and new possibilities of networking and communication? Or are we moving more quickly towards the nihilism of aesthetical relations of cyberspace! We need to develop ethical principles for dealing with information technologies. At least we are confronted with the need for more ethical decision making! Here we can mention the following subfields when it comes to ethical problems on the Internet:

#### **Marketing, Privacy and Protection of Personal Information**

In the digital network society the problem of protection of privacy is becoming more urgent. In marketing for example, collection of information about customers is very important in order to understand the wants and needs of consumers (Rendtorff, 2009). This makes it easier to respond to the preferences, shopping and buying behavior of customers. This issue is to which extent will imply a violation of privacy and to which degree corporations are required to protect privacy of customers and consumers. So discussion of privacy is one of the most important challenges that we are confronted with when we deal with business and information technology. It relates to the way we understand our conception of human beings in the modern digital world.

The right to privacy is justified by reference to the protection of the human person and to the protection of basic ethical principles in relation to the human person, e.g., the protection of the autonomy, dignity, integrity and vulnerability of the human person (Rendtorff, 2009). We can say that privacy constitutes a personal sphere around the human person that needs to be protected.

So in general we can say that information technology due to the many possibilities of revealing, collecting and storing information pose new challenges to the concept of privacy. In the information age there has been a change of the concept of privacy which is challenged by the many developments of modern society.

We can say that the ethical principles of protection of autonomy, dignity, integrity and vulnerability of human beings constitute a concept by which we can make an interpretation and definition of the concept of privacy in relation to employees and communication privacy.

#### **Employees and Communication Privacy**

One major issue is the rights of employees to communication privacy and the question whether a corporation has to intervene in the activities of the employee with surveillance of their activities on the Internet (De George, 2003). The question is the question of the rights and limits of surveillance of the Internet activities of employees by the corporation. Here we can mention privacy and surveillance issues in relation to both e-mail communications on the Internet by employees and surveillance of employees in relation to the Internet. The other issue is the right to surveillance of employee use of the Internet and whether the corporation has the right to intervene in this context. Furthermore, there is an issue of the corporation's right to keep records about the employees and their activities on the Internet and more generally the rights of organizations to intervene in employee privacy by keeping records.

#### **New, Old and Intellectual Property**

We can further mention issues of different kinds of property on the Internet. As we know the Internet challenge different kinds of property conceptions and we have to face the discussions about the scope and

limits of property rights on the Internet. In this context we can see how the possibility of uploading, downloading and putting different kinds of material, i.e., music, books, films software programs for download and upload constitutes important problems of copyright. Here, the tradition of copy-left see the possibility of new kinds of sharing of material while many corporations, i.e., from the music and film industry consider these issues as issues that challenge the possibility of earning money of film-makers, music players, writers etc. The discussion about pirating and down-loading of information technology material in developing countries represent an important example of this kind of challenges of piracy.

### **Ethical Issues on the Internet**

What kind of ethical issues can we generally mention in relation to the Internet? We have already mentioned the problem of weak-leak and how this problem challenges our conception of democracy. But we can mention further issues of governance and control of the Internet. Who has really the right to govern the Internet? States? The international community? And what about issues of censorship on the internet? (De George, 2003). Here, we can mention the conceptions of protection of domain names and the problems of security and encryption of the Internet and security matters relating to banking and other businesses on the Internet. There are also issues of anonymity and secrecy and the problem of spamming and fake messages that includes potential fraud. Furthermore we can mention all the problems of the limits of censorship in relation to the Internet, for example in connection with children's access to pornography.

### **Information Technology and Society: Business, the Digital Divide and the Changing Nature of Work**

There is furthermore a problem of the general impact of information technology on society (De George, 2003). What are the risks for society as a whole with so much dependency on computers and Internet technology and how do we deal with this risk? Furthermore, there is the issue of the possible legal regulation of the Internet in the process of globalization with different actors seeking to control the Internet. Indeed, as the dependency on the Internet is becoming bigger we can observe the emergence of issues of justice on the Internet. How do different sectors and people in society relate to the emergent digital divide between social classes, ages, and populations in the developing and the developed world? How can we say that these issues have an impact on how we organize our societies? The digital divide is not only an issue of access to computer technology but it is also a question of how we relate to the computer and understand what happens on the computer as long as we continuously perceive that everything becomes digitalized. Finally, when society with computer changes the nature of work there are profound ethical issues concerning work-life balance and the relation between employees and their corporation that emerge. In times of globalization we also see new kinds of outsourcing due to digital possibilities where employees employed in developing countries for very little salary serve corporations in the developed world in order to minimize costs and make management more efficient. Here, we need social responsibility and basic ethical principles in order to ensure social justice so that we avoid a digital divide of global society.

### **Conclusion**

We started by proposing the ethical principles of respect for autonomy, dignity, integrity and vulnerability on a phenomenological basis as the foundation for dealing with the ethical challenges of the Internet. Then we looked at some of the philosophical dimensions of the Internet in this phenomenological and ethical perspective. We have seen how the Internet expresses a new world that is a challenge to the bodily incarnated life-world.



The new world is nearly a Platonic world of ideas that challenge our bodily unity with the spatial—temporal daily world. But it is also a postmodern world of simulacra and without deepness and substantiality. It is a world where the individual might be lost and end up in nihilism and veil of aesthetics that takes away our experience of the real world. It may be a world that takes away our relation to the real life. This maybe the case for e-learning, but it may also be the case for the social Medias that create a world of self-construction and self-exposure through the life-world with no relation to the real world. So the only possible solution is to move from the aesthetic towards the ethical and “religious” engaged commitment of the self in relation to the World Wide Web. Engagement is the key to avoid the challenge of nihilism that is also the challenge of the Internet. This kind of engagement may be considered as a right foundation for developing an ethics of the Internet. And this was this ethics that we proposed in relation to different issues of the work of corporations on the Internet. In particular issues of privacy, power and also related to governance and globalization. On this basis we made the move from ethics to corporate social responsibility and social responsiveness and finally we discussed our case example about ethics in the bank-Internet encounter as phenomenological illustration of the problems of ethics in the phenomenological relation to the Internet.

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