
DIGITAL ETHICS

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▪ Digitale ethiek behandelt de invloed van digitale Informatie- en Communicatietechnologie (ICT) op onze maatschappij en meer in het algemeen de impact ervan op ons milieu. Digitale media-ethiek behandelt expliciet allerlei ethische vragen die te doen hebben met Internet en netwerk verbonden informatie en communicatiemedia zoals mobiele telefoons en navigatiediensten. Dit artikel introduceert eerst de invloed van ICT op onze maatschappij en milieu. Problemen zoals privacy, overaanbod aan informatie, Internetverslaving, digitale kloof, bewaking en robotica worden hier met een interculturele kijk behandeld. De boodschap van dit artikel is dat ethische bedenkingen kunnen en moeten helpen bij het vinden van duurzame oplossingen op de technologische uitdagingen van het digitale tijdperk.

▪ L'éthique numérique traite de l'impact des Technologies de l'Information et de la Communication (TIC) sur nos sociétés et plus généralement sur l'environnement. L'éthique numérique des média s'intéresse plus explicitement aux questions éthiques concernant Internet et l'information de réseau ainsi qu'aux média de communication tels que les téléphones portables et la navigation mobile. Cet article introduit d'abord l'impact des TIC sur notre société et l'environnement. Des questions telles que la vie privée, la surabondance d'information, l'addiction à Internet, le fossé numérique, la surveillance et la robotique seront abordées d'un point de vue interculturel. Le message de cet article est que la réflexion éthique peut et doit contribuer à trouver des solutions durables aux défis technologiques de l'ère numérique.

Since the second half of the last century computer scientists, such as Norbert Wiener² and Joseph Weizenbaum³, called public's attention to the ethical challenges immanent in computer technology that can be compared in their societal relevance to the ambivalent promises of nuclear energy. In the beginning the discussion was focused on the moral responsibility of computer professionals. But for scientists like Wiener and Weizenbaum the impact of computer technology was understood to be something that concerned society as a whole.

Half a century after Wiener's seminal work the *World Summit on the Information Society (WSIS)* developed the vision: "[...] to build a people-

*centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights"*⁴.

The WSIS also proposed a political agenda, namely "[...] to harness the potential of information and communication technology to promote the development goals of the Millennium Declaration, namely the eradication of extreme

*poverty and hunger; achievement of universal primary education; promotion of gender equality and empowerment of women; reduction of child mortality; improvement of maternal health; to combat HIV/AIDS, malaria and other diseases; ensuring environmental sustainability; and development of global partnerships for development for the attainment of a more peaceful, just and prosperous world"*⁵.

The academic as well as the societal debates on these issues have increased rapidly particularly since the rise of the Internet. I define "digital ethics" or "information ethics" in a narrower sense as dealing with the impact of digital ICT on society and the environment at large as well as with ethical questions dealing with the Internet digital information and communication media ("digital media ethics") in particular. "Information ethics" in a broader sense deals with information and communication including but not limited to the digital media. This paper addresses some ethical issues regarding the impact of digital ICT on society and the environment. In the second part I discuss issues such as privacy, information overload, Internet addiction, digital divide, surveillance and robotics particularly from an intercultural perspective. The message is that ethical reflection can and should contribute to address and find sustainable solutions to the technological challenges of the digital age.

The global impact of ICT on society and the environment

Economic, political and ecological activities of modern societies rely heavily on digital communication networks.

The relevance of digital ICT on the economy became obvious with the burst of the 2000 dot com bubble and, in my opinion, was one of the main factors leading to the recent world financial and economic crisis. Beyond the moral individual responsibility of politicians, bankers and managers, there is a systemic issue that has to do with the digitalization of financial and economic communication and information. Digital capitalism was and is still able to bypass national and international law, control and monitoring institutions and mechanisms as well as codes of practice and good governance leading to a global crisis of trust not only within the system but with regard to the system itself. Many policy and economic experts agree that in

order to develop a people-oriented and sustainable world economic system, national and international monitoring agencies as well as international law and self-binding rules are needed. Academic research in digital ethics should become a core mandatory issue of economics and business studies. Similarly to the already well established bioethics committees, ethical issues of ICT should be addressed taking as a model for instance the European Group on Ethics in Science and New Technologies (EGE)⁶ to the European Commission⁷.

ICT has a deep impact on politics leading to a transformation of 20th century broadcast mass media based democracy, or "mediocracy", on the basis of new kinds of digital-mediated interactive participation. New interactive media weaken the hierarchical one-to-many structure of traditional global mass-media, giving individuals, groups, and whole societies the capacity to become senders and not "just" receivers of messages. We live in "message societies". I call the science dealing with messages and messengers "angeletics" (from Greek: "angelía / angelos" = "message / messenger")^{8,9}. New ICTs are widely used for political participation and grassroots protest groups as well as by liberation and peace movements. By the same token, digital communication networks make possible new structures of political surveillance, censorship and control on individuals and whole societies. Digital ethics should address the question of the human right to communicate. The Internet has become a local and global basic social communication infrastructure. Freedom of access should be considered a fundamental ethical principle similar to freedom of speech and freedom of the press. Some of the rights stated in the *Universal Declaration of Human Rights* such as the right to freedom of thought, conscience and religion (Art. 18), the right to freedom of opinion and expression (Art. 19), and the right to peaceful assembly and association (Art. 20) need to be explicitly interpreted and defined taking the new and unique affordances of inter-networked digital media into consideration. Lawrence Lessig⁹ envisaged a situation in which the universality of Cyberspace is endangered by local codes of the market, the software industry, the laws of nation states, and moral traditions. He writes: *"If we do nothing, the code of cyberspace will change. The invisible hand will change it in a predictable way. To do nothing is to embrace at least that. It is to accept the changes that this change in code will bring about. It is to accept a cyberspace that is less*

free, or differently free, than the space it was before"). A free Internet can foster peace and democracy but it can also be used for manipulation and control. For this reason I assess a necessity to strive for a future internet governance regime on the basis of intercultural deliberation, democratic values and human rights¹⁰.

The third issue I would like to highlight concerns the impact of the "materialities" of ICT on nature and natural resources. Electronic waste has become major issue of digital ethics¹¹. It deals with the disposal and recycling of all kinds of ICT devices that already today have devastating consequences on humans and the environment particularly when exported to Third World countries. Issues of sustainability and global justice should be urgently addressed together with the opportunities offered by the same media to promote better shelter, less hunger and combat diseases. In other words, I advocate for the expansion of the human rights discourse to include the rights of non-human life and nature. The present ecological crisis is a clear sign that we have to change our lives in order to become not masters but stewards of natural environment.

Digital media ethics

The main topics of digital media ethics or digital (information) ethics are intellectual property, privacy, security, information overload, digital divide, gender discrimination, and censorship^{12,13}. They are objects of ethical scrutiny not only on the basis of universal rights and principles but also with regard to cultural differences as well as to historical and geographical singularities leading to different kinds of theoretical foundations and practical options. This field of ethics research is now being called intercultural information ethics^{14,15,16}. One important challenge in this regard is the question about how human cultures can flourish in a global digital environment while avoiding uniformity or isolation. Research networks on Information Ethics are flourishing in Africa (ANIE, African Network for Information Ethics¹⁷) and Latin America (RELEI, Red Latinoamericana de Ética de la Información¹⁸).

An example of the relevance of the intercultural approach in digital media ethics is the discussion on the concept of privacy from a Western vs. a Buddhist perspective. While in Western cultures privacy is closely related to the self

having an intrinsic value, Buddhism relies on the tenet of non-self and therefore the social perception as well as the concept of privacy are different^{19,20}. However, a justification of privacy from a Buddhist perspective based on the concept of compassion seems possible and plausible²¹. Digital surveillance of public spaces is supposed to ensure safety and security facing unintentional or intentional dangers for instance from criminal or terrorist attacks. But at the same time it threatens autonomy, anonymity and trust that build the basis of democratic societies. New technologies allowing the tracking of individuals through radio-frequency identification (RFID) or ICT implants are similarly ambiguous with regard to the implicit dangers and benefits. Therefore they need special scrutiny and monitoring²².

Recent advances in robotics show a wide range of applications in everyday lives beyond their industrial and military applications²³. Robots are mirrors of ourselves. What concepts of sociality are conceptualized and instantiated by robotics? An intercultural ethical dialogue – beyond the question of a code of ethics to become part of robots making out of them "moral machines"²⁴ – on human-robot interaction is still in its infancy²⁵.

Another example is the question of information overload, which has a major impact in the everyday life of millions of people in information-rich societies²⁶ giving rise to new kinds of diseases and challenging also medical practice²⁷. We lack a systematic pathology of information societies. Similarly the question of internet addiction particularly in young generations, is worrisome. For example there is a growing need for cell-phones-free times and places, in order to protect ourselves from the imperative of being permanently available. The ethical reflection on these issues belongs to a theory of the art of living following some paths of thought by French philosopher Michel Foucault. He distinguishes the following kinds of technologies, namely²⁸:

- "technologies of production, which permit us to produce, transform, or manipulate things,"
- "technologies of sign systems, which permit us to use signs, meanings, symbols, or significations,"
- "technologies of power which determine the conduct of individuals and submit them to

certain ends or domination, an objectivizing of the subject,"

- "technologies of the self, which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality".

How can we ensure that the benefits of information technology are not only distributed equitably, but that they can also be used by the people to shape their own lives^{29,30,31?}

Another important issue of digital media ethics concerns the so-called digital divide should not be considered just a problem of technical access to the Internet but an issue of how people can better manage their lives using new interactive digital media avoiding the dangers of cultural exploitation, homogenization, colonialism, and discrimination. Individuals as well as societies must become aware of different kinds of assemblages between traditional and digital media according to their needs, interests and cultural backgrounds³². The vision of an inclusive information society as developed during the WSIS must be global and plural at the same time. Concepts like hybridization or polyphony are ethical markers that should be taken into account when envisaging new possibilities of freedom and peace in a world shaped more and more by digital technology.

In a recent report on *Being Human: Human-computer interaction in the year 2020*, a result of a meeting organized by Microsoft Research in 2007, the editors write: "*The new technologies allow new forms of control or decentralisation, encouraging some forms of social interaction at the expense of others, and promoting certain values while dismissing alternatives. For instance, the iPod can be seen as a device for urban indifference, the mobile phone as promoting addiction to social contact and the Web as subverting traditional forms of governmental and media authority. Neural networks, recognition algorithms and data-mining all have cultural implications that need to be understood in the wider context beyond their technical capabilities. The bottom line is that computer technologies are not neutral – they are laden with human, cultural and social values. These can be anticipated and designed for, or can emerge and evolve through use and abuse. In a multicultural*

*world, too, we have to acknowledge that there will often be conflicting value systems, where design in one part of the world becomes something quite different in another, and where the meaning and value of a technology are manifest in diverse ways. Future research needs to address a broader richer concept of what it means to be human in the flux of the transformation taking place"*³³.

This remarkable quote from a meeting organized not by anti-tech humanists, but by one of the leading IT companies, summarizes the main present and future tasks of digital ethics as a critical interdisciplinary and intercultural ongoing reflection on the transformation of humanity through computer technology.

Conclusion

Humanity is experiencing itself particularly through the digital medium as a totality or system of interrelations. Who are we and what do we want to be as humanity? This question asks for a historical not a metaphysical answer. A negative vision of such unity are balkanisations and imperialisms of all kinds, including digital ones.

On the occasion of the presentation of *In your hands: A guide for community action for the tenth anniversary of the Universal declaration of human rights* on March 27, 1958 at the United Nations, Eleanor Roosevelt said: "*Where, after all, do universal human rights begin? In small places, close to home – so close and so small that they cannot be seen on any maps of the world. Yet they are the world of the individual person; the neighbourhood he lives in; the school or college he attends; the factory, farm, or office where he works. Such are the places where every man, woman, and child seeks equal justice, equal opportunity, equal dignity without discrimination. Unless these rights have meaning there, they have little meaning anywhere. Without concerned citizen action to uphold them close to home, we shall look in vain for progress in the larger world"*³⁴.

Sixty years later, we are much more aware on how important this declaration was and how difficult it is to put into practice, to make human rights come alive "*in small places, close to home*". This Declaration was not only the right ethical and political answer to the atrocities of World War II but it was also the start for a new

kind of international policy based on common ethical values and principles facing the challenges of a digitally globalized world. Nevertheless, today we are facing additional global challenges expressed in the *UN Millennium goals*³⁵, namely :

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

These goals begin "*in small places, close to home*" too. They can be achieved only if we continue and expand the freedom campaign towards nature, i.e., if we expand the goals of human rights to nature as well. Digital globalization should make us aware of the human interplay with each other in a common world instead of making of the digital perspective over our lives and over reality a kind of digital metaphysics or (political) ideology. I call this relativization of the digital perspective "digital ontology"³⁶.

Who are we in the digital age? As human cultures become digitally hybridized this process affects social life in all its dimensions as well as our interplay with nature. The key task of digital ethics is to make us aware of the challenges and options for individual and social life design. The digital medium is an opportunity for the subjects of the 21st century to transform themselves and their relations in and with the world. This implies allowing each other to articulate ourselves in the digital network, while taking care of historical, cultural and geographical singularities. An ethical intercultural dialogue is needed in order to understand and foster human cultural diversity. Hereby we must look for common ethical principles so that digital cultures can become a genuine expression of human liberty and creativity.

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Notes

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