Information Technology
and the Old Problem of Totalitarianism

by Andrzej Kocikowski[1]

The following text was the first in a series of several works which presented possible black scenarios of the development of digital civilization. The author attempts to demonstrate the ways in which we are being enslaved by two totalitarian forces: technological and cultural. Key words: computer ethics, global ethics, ICT, totalitarianism, utilitarianism.

In the proceedings of the Polish philosophy convention held in Toruń in 1995[2], in the section for the cognitive sciences you will find an abstract of a hotly debated paper.[3] Its author draws attention to two points which she says are key issues: a) the global dimension of computer ethics, and b) the attempt to apply Utilitarianism as the natural foundation of computer ethics.[4]

A year later, during another scientific conference,[5] there was another discussion some of the consequences of the theses put forward by Dr. Górniak. My suggestions met with numerous reservations, especially from a representative of the North American philosophical school.

Some time has passed, and I think this is a good opportunity to return to the subject which once evoked such a heated debate. If Dr. Górniak is right in her claims a) and b), and if computer globalization is a process which cannot be halted, then we cannot but observe that we are heading along a straight course for the biggest dictatorship in human history, and the biggest possible totalitarianism. I'll try to argue my case for this statement as best as I can.

We have already had several opportunities to present the fundamental issues in computer ethics.[6] The argument I am going to use calls for a direct reference to those materials. I ask the reader to forgive me for recapitulating the conclusions most relevant for this question.

It is no longer possible for many societies to function in many aspects of their lives without resorting to computers (or, more generally, computer technologies). The question arises whether this undeniably novel situation is not exerting an influence on the lives of human societies, and if so, what kind of influence.

The answer to the question whether there is an influence is in the affirmative - yes! But the answer to the question what kind of influence it is (viz. what it affects, to what extent, how

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1   **Amended July 23, 2010**: the polish language version of the text was prepared in 1998. It was presented at the conference "Zagrożenia wynikające z rozwoju informatyki" / "Dangers arising from the growth of ICT" (Komitet Etyki w Nauce przy Prezydium PAN, 20 października 1998 r. / Science Ethics Committee of the Polish Academy of Science, Oct 20, 1998). It was published in the "Nauka" ("Science") quarterly of the Polish Academy of Science, issue 1, 1999. It was subsequently published in "Ethical issues arising from the advancement of science", CUN PAN (Polish Academy of Science), 2003. It was published once again in "Ethical Problems in the Rapid Advancement of Science" Polish Academy of Sciences, Warsaw 2005.

2   VI Polski Zjazd Filozoficzny (6th Polish Philosophical Congress), 5-10 September, 1995, Toruń.

3   'The English version of the paper: K. Górniak-Kocikowska, "The Computer Revolution and the Problem of Global Ethics", T. W. Bynum, S. Rogerson (eds.), *Global Information Ethics*. A special issue of *Science and Engineering Ethics*. Vol. 2, No. 2, 1996, p. 177-190.

4   Recently we have been using the term "information ethics" more and more often. See A. Kocikowski, T. Bynum (eds.), *Wprowadzenie do etyki informatycznej* (*http://repozytorium.amu.edu.pl/jspui/handle/10593/502*).

5   Ethical Issues in Business and Information Technology, Institute of Cultural Studies, Adam Mickiewicz University, Poznań, Poznań-Kicin, 24-25 June 1996.

6   E.g. the Toruń Conference. Cf. A. Kocikowski, "Kilka uwag o etyce komputerowej", *Wartość i świadomość w filozoficznej drodze,* ed. E. Czerwińska, Poznań, 1995.

deeply, how varied it is, which individuals it concerns and with what social consequences, as regards the near and more distant future etc..) is not so self-evident nor, for that matter, simple.

The literature in philosophy has provided numerous testimonials that there have been attempts, and more and more bolder endeavors are being undertaken to formulate satisfactory statements on this question.[7] Let's admit straight away that the problem has already built up a substantial collection of ideas as regards the principles according to which we should be using computers (computer technologies). I shall add a few words of commentary on these principles.

Computer technologies offer us tremendous opportunities for activities, including of course the possibility of using them against humanity.[8] Numerous instances of computer abuse have induced some American philosophers to embark on an analysis of the nature of computer technology and its social impact. They have also been motivated to formulate and justify a set of working standards for the ethics of the use of computer technology. (This is a reflection of an important feature of American civilization.) In this way a new field of thought emerged which after a time was termed computer ethics. Quite naturally, the common factor shared by the overwhelming majority of papers within this field has been (and still is) acknowledgment of the claim that computer technology is exerting an influence on the world of human values.[9]

To sum up: computer ethics was born in the USA, the country where the largest number of computer technologies have been created and are being used. It was in the USA, too, that a significant volume of "computer abuse" first started to appear. That is why American philosophy and philosophical publications can claim the largest intellectual contribution quantitatively and presumably also - so far - qualitatively as well on this issue; though more and more often Europeans are expressing a hope that the disproportion will be diminishing.[10]

Let's move on to the analysis of the fundamental problem. The global nature of computer technologies is turning before our eyes into an irrefutable empirical fact. An example is the everyday movement of hundreds of billions of dollars on the stock exchanges of New York, London, and Tokyo. The everyday circulation of similarly huge sums of money among the banks of Manhattan, Chicago, and San Francisco. The daily clatter of, for all intents and purposes, of billions of identical cash tills in shops and stores around the world. The daily buzz of tens of thousands of telephone exchanges. The everyday, unfathomable ocean of digital information sifting to and fro from hundreds of communication satellites. The daily work of millions of devices reproducing digitally recorded music. The everyday work of hundreds of thousands of navigation computers mounted on board passenger and military aircraft. The everyday work of hundreds of millions of personal computers installed in institutions and in private homes all around the world. The everyday activity of scores of millions of computers scattered throughout the world, and integrated in that small portion of cyberspace that is called the Internet.

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7   E.g.. the first *Computer Ethics Bibliography Version 2.0* (edited by T.W. Bynum, C. Senical, & A. Fusco, Research Center on Computing and Society, Southern Connecticut State University: New Haven, 1993, listed just 300 entries. Its next edition had 370 items. We may assume its current version has over 600 bibliographical entries and that this figure will continue to grow.

8   For example, the computers in the cockpits of big passenger jets effectively control the entire process for the determination of the aircraft's position and course. But it's enough for just one person to tamper with the flight-deck software to bring the location as shown on the computer out of line with its actual location. The Korean Jumbo Jet tragedy of several years ago, in which hundreds of passengers lost their lives when the plane was shot down by Soviet air force planes, is a sad instance of the use of a computer against mankind.

9   So says the fundamental definition of computer ethics. The list includes the following values: freedom, responsibility, privacy, private property, distributive justice, self-realization, aesthetic freedom, and matters concerning life and death, pain and suffering, and health. Cf. A. Kocikowski and T. Bynum (eds..), *Wprowadzenie do etyki informatycznej.*

10   For instance, the first European meeting on computer ethics was held in late March 1995 at De Montfort University, Leicester (UK). It was organized by Simon Rogerson and Terrell W. Bynum, and attended by many researchers from the USA; while Western Europe was represented by participants from Belgium, Holland, Spain, Norway, Finland, France, Germany, Portugal, and a large British group. Central and Eastern Europe was represented by a group from Poland. Cf. *ETHICOMP95, An International Conference on the Ethical Issues of Using Information Technology, Proceedings, Vols. 1 & 2,* De Montfort University, Leicester, 1995. The next European meeting, ETHICOMP96, was held at the University of Salamanca. ETHICOMP98, the Fourth International Conference on Ethical Issues of Information Technology, was held on *25-27* March 1998 in Holland (at the Erasmus University).

In the practical dimension as regards business, science, and education, this means that - only today - several hundred million people all over the world are making up a supranational society working according to the same rules and every day performing essentially the same operations.[11] This is the result of their activity - especially their professional activity - being dependent on a unified system made up of specific computer hardware and software, in other words of specific computer technology.[12] So we arrive at our first conclusion: (A) the globalization process of computer technology is a patent instance of the development of a totality.

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The process of computer globalization is on an upward trend. You won't find any important area of social activity free of the continually increasing presence of computers. Trade, finance, management, defense, the police, administration, the media, information transfer, education, science - none of them could exist today without computer technology. For many other fields (e.g. the Swatch watch) reliance on computer technology is the only means to stay on the market. It is a truism to say that those aspects of social life which will prove unable to adapt to some sort of computer technology will fade away into oblivion. All the signs are that it will be futile trying to stop or counter this trend.

The fundamental effect of this process - at least as regards the matters we are discussing - will be the systematic expansion of the supranational group of people performing the same actions using the same equipment. Hence (B): we must recognize the expansion and consolidation of this totality as a foregone conclusion.

Let's now go back to thesis a) from the beginning of this article. In her paper Krystyna Górniak-Kocikowska said that the ethics of the future would be computer ethics in the sense that it would emerge thanks and due to the computer revolution, and also because it would be of service to the people of the computer age. For this reason it would be a global ethics, since such is the nature and the impact of computer technology. If she is right, then a direct consequence of her observations, and my previous remarks, is the thesis that human society is facing the threat of a massive totalitarianism on an unparalleled scale. If the computer globalization process (its totality), along with the upward trend in computer technology are a foregone conclusion, then so is the global character of computer ethics. This means no more and no less than that a certain material totality will be supported by a totality of awareness adapted to its requirements. This in turn will mean that the supranational society of individuals performing the same actions on the same equipment will be compelled to observe the same standards (values), that essentially, these people will be compelled to think and feel in the same way.

Observance of the same standards and values in itself is no cause for concern. Even when it applies to great supranational communities. After all, the international community has been making great efforts for decades to achieve consensus or unanimity on many important issues. They include, as we all know, international security, the struggle against terrorism, the production and trafficking of narcotics, and measures to counteract organized crime. But still, in certain situations the categories of unanimity and general agreement seem to make us very apprehensive. Especially in those countries where the bitter taste of the twentieth-century dictatorships can still be felt. Let's scrutinize our worries one by one.

As I have already written, computer ethics was born in the USA. It is generally known that North American culture is lodged in a specific philosophical tradition in which ethics is essentially

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11   I am putting special emphasis on the supranational aspect of the community of computer users. Due to the construction of the computer and its software, a bank clerk working on an IBM PC with a Microsoft Office program has to perform the same operations regardless of whether he is working in New York, London, Seoul, Warsaw, or Sydney. A designer working on an IBM PC with an AutoCAD program performs the same operations regardless of whether he is working in New York, London, Seoul, Warsaw, or Sydney - due to the construction of the computer and its software.

12   Again I stress that the several hundred million (today) do not make up an international community. It is not a case of people who represent their nations coming into contact with each other, but of individuals operating outside the structure of any specific collective group of which they are members.

perceived as the theory of decision-making (the theory of making the right decisions);[13] and in the American milieu this means above all the ethics of Utilitarianism.[14]

The philosophy of computer ethics' country of origin is steeped in the ethics of Utilitarianism. Thus the approach of American researchers, who see Utilitarianism ethics as the natural foundation for computer ethics, should come as no surprise. Computer ethics, and within its structure the system of standards and principles for the correct use of computer technology, will presumably prove useful (yet another important feature of the North American civilization) in the drawing up of an appropriate legal system. This legal system will determine which kinds of use of computer technology are allowed, and which are not. In view of the global nature of computer technologies, (C): US legislation may soon be establishing the rules of the game in the strangest world of them all.

The global nature of computer ethics - I repeat yet again - is a foregone conclusion. The verdict has been passed as regards the above-described totality and it cannot be revoked. The "sentence" must be served. But can we influence the *manner* in which it is to be served? Must it all run according to the plan devised within just one culture (civilization)?

I don't think it has to be so. There may be other ways. On condition that the North American civilizations immediately join in the great debate on the philosophical foundations of computer ethics. Only on that continent will civilizations other than the North American be able to make their own, salient contributions from their system of values. Only in such an indirect manner will they be able to have a say what sort of legal system will be set up for the world of the computer civilization. It is a great opportunity, as the leading US researchers in computer ethics are looking for common ground for consensus. They are trying to establish an international co-operative of people interested in programming the achievements of American philosophy and contributing their own, (presumably) valuable portions to the building up of a foundation for computer ethics. A special example is Terrell Ward Bynum, director of the Research Center on Computing and Society in the Southern Connecticut State University, New Haven, one of the principal American researchers. For quite a few years he has been implementing an ambitious program to internationalize the discussion on the philosophical foundations of computer ethics. He is a very active working partner of several new European centers for computer ethics. He is also a member of the foremost US government and non-governmental institutions interested in the drawing up and implementation of educational curricula on this issue.

The existence, and especially the growth of the totalities discussed in this paper is an outcome of the fact that more and more often the decisions relating to fundamental issues of economic development throughout the world are being made in compliance with the business interests of the computer oligarchs, producers of the hardware, but especially of the software.

The globalization of computer technologies will mean making the fundamental social processes affecting the lives of billions depend on the decisions the computer oligarchs make. Their business interests are more and more frequently proving the crucial factor determining economic growth worldwide.[15] It is to them that the world's capital resources, vast and to a certain extent still independent, still operating according to rules that are in fact quietly receding, will be subordinated. They, the Mighty Few, will be deciding what billions of people throughout the world will be doing, and how they are to carry out their tasks. They will be deciding what people are to think and feel. They will be in a position to control everything that concerns that extraordinary,

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13   I would like to point out that one of the most difficult problems in ethics is the determination of what the "right decision" is. Here, too, American ethics and philosophy of law, and social philosophy are putting forward solutions very different from the ones we are accustomed to in Poland or Europe. An example is John Rawls' very popular theory of justice in *A Theory of Justice,* Oxford: OUP, 1976.

14   It would be impossible in such a short paper to present all the important points for the issues at stake here. Suffice it to say that this trend in ethics includes its founder, Jeremy Bentham, and the continuer of his legacy, John Stuart Mill, who refined **Bentham's** Utilitarianism. Most of the American scholars working on computer ethics adopt a Utilitarian ethics, though it is not their only philosophical source. They also relate to Hobbes, Locke, Rousseau, Kant, and Adam Smith. Recently they have also been referring to Aristotle. Aristotelian - alongside Kantian - ethics are essentially the most serious rivals to Bentham's Utilitarianism for them.

15   A good example for this analysis is the list of the Ten Most Powerful People published by *Time* magazine on 17 June 1996. In it Bill Gates, owner of Microsoft, is second right after the President of the USA. It is Microsoft that has been the hero of the social history of the totalities I am describing in this essay.

supranational empire. We cannot help thinking that we are heading along a straight course for the biggest dictatorship in human history, the biggest of all the possible totalitarianism. Let's try to save as much as we can from that program.

Amended July 23, 2010:

see: *http://repozytorium.amu.edu.pl/jspui/handle/10593/501*
        http://repozytorium.amu.edu.pl/jspui/handle/10593/474
        http://repozytorium.amu.edu.pl/jspui/handle/10593/447
        http://repozytorium.amu.edu.pl/jspui/handle/10593/455