

THESES

1. A rather general approach to the very *nature of technology* is proposed. In this approach the whole field of technological praxis from making of primitive tools to the Internet-use is covered. Technology is a specific form of human agency which yields to – an imperfect – realization of the human control over a technological situation, i.e. the situation is not governed to an end by natural constraints but by specific human aims. The components of the technological situations are the followings: a given collection of (natural or other artificial) beings, humans, human's aims, and (situation-bound) tools. Based on a technological situation analysis the essential form of the „tool-making”, the complex system of relationships between science and technology, the technological practices with and without machines, the finiteness or imperfectness of any technology, and the engineering, i.e. the possibility of creation of situations has been considered and presented.

2. For the better comparison of the very different philosophies of technology – following Feenberg's analysis – the so-called *fundamental question of philosophy of technology* is formulated and its two sides are identified. The existence of such a fundamental question demands that every philosophy of technology has to declare its position on the relation between technology and society. On the one part it is necessary to decide between the autonomous or non-autonomous (i.e. humanly controlled) existence of technology, on the other part it is necessary to decide for or against the value-ladennes of technology. It is shown that depending on the accepted positions of a philosophy of technology in the fundamental question its ethical problems will be very different ones. Their significant differences are presented.

3. Regarding the ethical questions in technology the crucial role of a *metaethical principle* was suggested. The principle is the following: every technological situation at the same time ethical situation withal. A fundamental correlation appears in this principle: every technological process at the same time is a consciously performed action, a kind of „act” in which its final end can be considered as a consciously chosen end, as the „good”. The efficiency of the technology is the ethical good itself, or vice versa: the good itself is the efficiency of the technology. Of course there are many additional good; the very purport of this good is the power, the power over the technological situation which ensures the success of the given technology. Applying this metaethical principle almost all the traditional ethical

problems of technology can be treated in a rather homogeneous system of ideas. Following this methodology almost all the ethical problems of technology associated to the general, the normative and the applied (or professional) levels of the ethical universe were collected and critically analyzed.

4. Comparing the characteristics of technologies in general and those of *information technologies* it can be demonstrated that virtuality and openness are the most crucial specific properties of every components of information technologies. In this way the situations of the information technologies and the procedures of the control over the situations can be considered as open systems. The source of virtuality and openness appearing in the information technologies can be found in very nature of the information, of the basic medium of these technologies. It was argued for the following definition of information: information is an interpreted being, i.e. the information is a component of the interpretation process. Slightly generalizing these statements the value-ladeness of information technologies with postmodern values was demonstrated.

5. Comparing the characteristics of the *ethical principles* of technologies in general and those of *information technologies* some specific characteristics of the ethical problems in information technologies can be presented. Because of the openness of information technological situations in this field we can find specific ethical situations with “open end” which means that we definitely can not foresee the consequences of our acts, so the ethical problems of information technologies essentially differ from those of traditional ones. The different value-ladeness of computer- and Internet ethics is emphasized: the computer ethics is imbued with modernist values, but the Internet ethics is imbued with rather postmodern values.

6. During its emergence, running and decline we studied the social and ethical aspects of the *Y2K problem of computers*, and some details of this research is presented as a case study of social and ethical problems in information technologies. For the better understanding of the problem within the complex phenomenon its technical, business and social dimensions was separated and their foreseeable implications were analyzed, moreover a few suggestions were presented to avoid its bad social consequences. It was shown that the appearance and management of the Y2K problem was a specific measurement of consolidation of the postmodern network society all around the world.