

*Prof. dr. sc. Ante Simonic
Predavanje na trecoj CARNetovoj
korisnickoj konferenciji CUC 2001
Zagreb, 24. rujna 2001.*

Informatical Reaches of the Search for Meaning

“In order to form the people, one must inform the people”

Although communication among humans was always a significant issue, today we take it very intensively – almost existentially, with the whole situation assuming paradoxical features. Namely, because of the vast technological and informatical possibilities of communication among humans, we perceive the world as never before, in all its abundance and diversity of shapes, colors, customs, heritage, etc. Much has become readily available and familiar to us, and participating in activities in distant part of the world became significantly easier. Man became “a citizen of the world”, always up-to-date about current affairs – yet, at the same time we witness growing separation and estrangement among people. The probable reason is that modern communication media remove us from reality, bombarding us with masses of data, images and illusions without internal consistency. Quite often are commercials, sport, politics, romantic films, violence, pulp, music, science, philosophy, sex, etc. mixed together without any logical organization. We are imposed a view that the most important thing is to amass as much data as possible, even superficially, and that we needn’t exert ourselves in order to accomplish it.

Humankind is threatened by the global weakening of spirit and leveling of intellectual standards, followed by suffocating identities of millions of passive consumers of a mediocre media offer. Here arises the problem of information media's ethics, as they have significant influence on public opinion in all areas of public affairs – that is, on freedom and progress of humankind. Because of our dynamic society, hunger for information (business, scientific, sport, or political information, or even weather forecast) is increasing – one expects that information system be of supreme quality, based on responsible selection of data to help users understand the world and find best solutions. Important information definitely mustn't be suppressed and distortion of data is unacceptable, but the sheer amount of information mustn't impair our perception of the whole and its gist.

*Lotman defines culture as: “The all-inclusive body of non-inheritable information that is gathered, stored and transmitted by different collectives of human society.” This means that information has fundamental value in defining culture, with instantly usable information agents having most value from the consumer's perspective. On the other hand, for a scholar investigating culture, it is of the utmost importance to decipher that part of the message that enables realization of culture. The aim of such research is a reconstruction of culture as a historical continuity of a hierarchy of codes. Namely, “every type of coding culture-historical information is connected with fundamental forms of public consciousness, community organization and self-organization of personality.” In Antique and throughout Medieval Times, the term **Being** was in the center of attention. The term **Cognition** later imposed itself, and today we consider information processes and communication to be*

fundamental issues. The actuality of modern challenges is accounted for, by the fact that all human knowledge accumulated up to 1900. doubled in 1950. Next time it doubled again as soon as 1960., and now this happens every eight to five years. It has been attempted to solve the resulting problems of storing, transmitting, editing, processing and systematization of knowledge by the new “scientifically-systematic approach”, which integrates production, science, education, management, decision-making, informing, technology, spiritual work, etc. The driving forces behind this approach are “systematic thinking”, “integral production” and technological devices, with the electronic computer as a basis.

Low price and simplicity of use caused a widespread use of computers – they are everywhere, e.g. as integrated parts of modern telephones, automobiles and television sets. They analyze a variety of results, enable efficient statistical analysis, simulate combinations of a large number of factors, e.g. protein sequences, help work with text and graphics, with editing literature, control experiments and technical processes, etc. For example, an average computer can perform more arithmetical calculations in a year than the entire humankind performed from its beginnings up to 1945. Personal computers contributed to the democratization of informing, to the connecting of people from distant dwellings and cultures, and to expansion of understanding in all areas – that is, to improving the quality of human life. The growing integration of information science in production significantly improves its efficiency (according to some sources, up to 40-50%) and the productivity of work (according to some, by 80-90% on the average), consequently reducing production expenses. This opens new possibilities for positive, new individual and social accomplishments. A new type of added value is created, the structure of production is improved qualitatively, robots and

computers replace human labor, automatic project development, planning and controlling become possible, control and decision-making systems are improved on both micro and macro level, etc.

Seeing that computerization is becoming increasingly cheaper, its effect on science and technology as well as on all aspects of everyday life becomes more intensive. I ask a question: Where would science and technology be – that is, what would everyday life be like, without computerization; and what prospective will computerization enable?

However, under the influence of modern scientific-technological revolution, especially under the influence of microelectronics, continuing computerization in modern society emerges, where information becomes the primary resource. Information can be defined as a fundamental social strategic resource that has highest social usable value, and that permeates all human activities in a process of social reproduction, which is the main developing factor (intellectual), more important than material factors are.

Is F. Fredkin right, when claiming that information is more fundamental than matter and energy – because quarks, electrons and atoms consist of bits, and the same principle applies to DNA? However, we instantly ask a question: What elements does information consist of? How to investigate the precise relations within the triad: information, matter, energy? Is information just one of the forms of matter and energy, or is it perhaps their equivalent? We contemplate Fredkin's idea that the Universe may be compared to a giant computer, and that the function of all bits – that is, the behavior of the whole universe – is directed by a universal law of

programming, in which fascinating complexity breaks down to rules of elementary simplicity.

If the universe is a multitude of data, should they be collected, and increase knowledge through science and education – or is the answer to enlighten ourselves through blending with cosmic knowledge, for example through faith? Upon these problems new dilemmas extend: what is the degree of our freedom of choice, and what are our cognitive limits? What is the danger of overloading both individuals and humankind with information? Analyzing this last question, we are aware that information overload can be as dangerous as industrial pollution and food poisoning. How effective are our biological defense mechanisms that keep away the noise of the many above logical noise and flashes of light, the pressure of commercial advertising, political pamphlets, meaningless and often dangerously distorted data? What is pollution of social space with information that leave dangerous trace? How to close eyes and ears optimally, because if we do it too intensively or unselectively, we will disable progress? The ideal is therefore not an absolute openness without discrimination, for information in itself is neutral – but informants can convert us, pulverize us and devour us. How to tie instinct to wisdom, and is there a possibility of a solution other than spontaneous social censorship? Is the best option a censorship grounded in the actions of intelligent, wise and tolerant people, humanistically educated, capable of making quality decisions, cultivating firm beliefs and acting dedicatedly? Because of the remarkable advancements of communication systems, many connections among people from the whole world become very intensively interlocked.

But, many ask if electronic communication systems necessarily suffocate democracy, as they allow for a very efficient control of information. While asking so, they point at the Orwellian concept, which shows how small political or other cliques may manipulate the masses. Thus, questions arisen aren't only about quality, quantity and cost of technical equipment – an apparatus for transmission, storing and designing of information – but also about control and ownership of it.

Analyses show that the development of modern technology hasn't decreased the number of published book, but increases it (at least for now). The number of published magazines is increasing, the number of television and radio programs, and databases of all sorts is rising at a fascinating speed. Information, ideas and interpretations from an increasing number of information centers throughout the world become available in their entirety and almost instantly to users in all countries, meaning that people have an increasing body of data from different sources available at their disposal.

Therefore, a chance of information blockade is ever decreasing, and so new technologies become initiators and protectors of democracy and freedom. It is important to encourage the principle of the individualization of informing (for every person), not ideological collectivization – and affirm the need for active selection, and not passive acceptance of data without participation and criticality. The greatest problems of the described process are posed by the need for all the people to use the modern information system freely, to become computer literate, and to wisely choose valuable material from the enormous selection available. Many therefore conclude that a mass share, in what

was mentioned becomes a key test for the improving and preserving of democracy in the next century.