The Impact of the Modern Information Environment on the "Homo Verum"

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Abstract—**The Informational Revolution carries, together with the benefits, threats to humans, to the inner world and the spiritual sphere of society. The transformation of scientific knowledge and mass media into their opposites, the virtualization of all spheres of human life, the formation of "human-computer" in the global network, the digitalization of the economy require new theoretical research and decisive action to save the humans and the society.**

Keywords—information society; virtual revolution; identity crisis

I. Introduction

Humanity has entered such development level where information has become one of the main values in people's lives. Now the state of the information environment is beginning to determine crucially the quality and living standard of the whole society, and of each person individually [1].

In today's society, information is associated with the creation, reproduction and storage of meanings as operations that take on a decisive role. The form of information storage becomes "simulacrum" as a model of a real object or event. Modern man loses touch with the real world; he lives among models-simulacrums. As a result, the opposite of the present and the artificial disappears. In politics, thanks to the reproduction of ideologies, the distinction between right and left wings is removed, in science — between the true and the false. The media "hunt for sensations" or artificially create them. The faith that existed in the previous types of society is lost — at first — religious, then scientific, which gave an idea of the ultimate goal. In the information age, technological development has shifted attention from values and higher goals to the means of achieving the desired results, not verifiable by values and moral criteria. Not the search for the truth, but the solution of status problems has become the main thing [2]. The creation of a new information and communication virtual environment leads to a number of anthropological problems. First of all, there is a risk of loss of identity. Gaming permeates all areas of social life. Freed from traditional taboos, the psyche gets the opportunity to realize itself in the most incredible way. There is a new type of consciousness, where, like flashes of lightning, intuitive insights are intertwined with the guesswork of the mind, science uncritically includes elements of religious worldview, religion pragmatically uses the data of science, and high culture coexists peacefully with the mass one. Designing of the reality becomes a fundamental feature of a human being. "Homo novum" loses the core of being "homo verum". Life turns into a kaleidoscope of images, a set of roles produced by the human consciousness under the influence of mass media. The loss of identity is manifested that on the one hand, the personality of the human being becomes more multifaceted, the possibility of choice and creative experiments expands, and on the other hand, the connection with the real world is lost, the idea of the real world is blurred, the idea of self-status, goals and idea of life [3].

II. Science and Media in the Informational Society

At the beginning of the 21st century, the emphasis in the analysis of the social realities of the informational society

shifted towards the interest of knowledge — as a special kind of information. On the early stages of the development of the informational society, the avalanche-like growth of information and its value neutrality led to a situation of "information shock" (according to the terminology of A. Toffler). The challenge is to highlight the most important, orderly and value-oriented information in the flow of information, based on which, a person can carry out effective actions. The specifics of knowledge have been revealed, which is that the knowledge is activity-oriented. The very process of knowledge mastering is in the constant dynamics. Standards and requirements are changing, and basic information got during the process of special and higher education is rapidly becoming obsolete. In order to be successful in today's world, it is necessary to improve the existing knowledge and activities quickly enough. It is connected with the fact that a specialist in the labor market has to change constantly the profile of activity in order to be in demand.

The informational society requires systematic professional development. Information technology and related activities are changing so rapidly that it is a matter of the need for lifelong learning. The learner chooses one or another standard of learning. In a competitive and consumer-friendly environment, the courses offered for advertising means are not always able to provide with the educational information of high quality. There is a real possibility of falsifications and speculations on fashionable, but less productive topics [4].

Tough competition requires quick and original solutions. Due to the urgent need for innovative initiatives, the importance of sensitive response for today's needs is increasing. One of the most important challenges — is to develop special qualities associated with constant retraining and a kind of "reprogramming" of oneself depending on the changing needs of an intensively evolving business environment. There is a need for continuous training: the employee's accumulated stock of knowledge and information can expand and change throughout all his working life. As a result, the specialist is required not just to master a certain knowledge, but, first of all, to master the methodology of finding a new one [5]. In today's society it is quite difficult to determine what piece of existing knowledge a specialist will need to solve a non-standard problem. Large amounts of information are being used in search of compensation. Knowledge loses its systemicity and integrity and turns often into a mosaic set of individual fragments that provide certain slices of activity. The contradiction of anthropological risk of hyperactivity is that, on the one hand, a person is given the opportunity to choose a wide field of non-standard creative solutions. On the other hand, the expansion of human information saturation, including at the level of knowledge, cannot be infinite. There are biological limits to both the perception of information, the processing of information, and the usage of information in activities. Constant change of activity generates fatigue, depression. And there are attempts to remove depression with some new, usually gambling activities. This attitude makes the situation only worse. This

kind of hyperactivity leads to serious consequences up to mental illness.

Expanding knowledge leads to the need for new one, which creates a paradoxical situation of permanent lack of knowledge. Information is disturbing. It contains its own opposite, at the same moment reproducing both knowledge and ignorance. Information contributes to the further realization of some opportunities, but it also fuels our knowledge of the existence of other possibilities. The information should not be correct, but only plastic. It should contribute to the crystallization of the possible, providing the necessary operations and at the same time conveying the ambivalence of knowledge and ignorance of the next situation. In this sense, the informational society is chronically underinformed.

Modern technology makes human being a programmed one in all spheres. The unity of information production ensures the unity of all processes in the world. A post-industrial society is a society in which all elements of the economic system are affected by the actions of society. These actions do not always take the form of the conscious will of the individual or group of individuals.

Within the process of the information society formation, the challenge of theoretical studies of mass communication arises. The mass communication tool could be understood as the intercommunication, and its appliance means revealing directly the mass communication specifics of telecommunications and information technologies, as well as the information aspect itself of the management impact of the media themselves. Through communication, the sphere of intercommunication is formed in such a way that it itself has a formative effect on people (on the principle: the sphere of intercommunication forms us, and we, in our turn, form it ourselves, remaining within the limits set by the sphere) [6].

The reality of modern man appears as it is given by the mass media, especially — by electronic media. And it leads to the fact that there is a struggle begins in the society for the manipulation of public consciousness. Nature does not stand emptiness, and one who is unable to control his behaviour, inevitably falls under the power of others and becomes a conductor of someone else's will. If a person or a state is unable to carry out the process with their own will so the future goals for them could be formed from the outside. And the expectation of future events forces people to carry out certain actions today. This is reflexive management, and the one who manages, after he formed the idea of the future, receives the target behavior of the managed one.

"Media" serves as a mediator between the owners and those who depend on them. Its advertising agents form a universum of communication (with possibility of a single-dimensional behavior to self-expresses), and its language is a testament of the identificational processes, of the unification, systematic development of positive thinking and mode of action, as well as focused attack on transcendental, critical concepts [7].

Passive mode is the logic of information technology. The mass media reinforces the models of silence of the crowd,

which began to form in theatres and concert halls of the last century. The idea of a cultured spectator, a passive eyewitness is intensified by the media.

There is a deep connection between globalization, the incorporation of society and human perceptions of oneself and the world. The essence of this connection is determined by the fact that without modern information technologies a new structure of society would be impossible. The above structure is characterized by M. Castells as informational capitalism.

The core of this informational capitalism is a new man — "homo novum", who has learned its rules, symbols, language, knows how to handle with new technologies. Such a person acts as a carrier of a new informational culture, as the core of post-industrial, information civilization. The above person could be named as a computer person, because he has permanent contact with the universal informational environment, and this, in turn, changes the type of his mentality. For this mentality the system-forming values of human being, such as religious and national feelings appear as information.

III. Virtual Revolution

In a new situation, when the information becomes a decisive resource and the contours of socio-economic development begin to be defined, a virtual revolution takes place. By Jaron Lanier's definition, virtual reality is an immersive and interactive simulation of realistic and fictional environments, i.e. some illusory world in which the human being is immersed and interacted. This world is created by imitation a system, which is capable of generating appropriate incentives in a human's sensory field [8].

The term "Virtual Reality", which was proposed in 1989, referred to an artificial three-dimensional world, a cyberspace created by a computer and perceived by humans through special devices. Cyberspace is a large electronic network in which virtual reality seems to be curtailed. Cyberspace, or the Internet, is a semantic version of virtual reality, where the dominant position is occupied by the logical-language apperceptive structures of information.

Virtual reality provides with an excellent opportunity for a person to conduct various kinds of researches, including — in psychological sphere. Virtual reality, together with skillful manipulation, could be an excellent guide for any person, let us say, in the field of professional knowledge. On the other hand, virtual reality is a kind of drug, because the object of its influence is the human's brain, as well as — it is the resource of power over people, when a person breaks away from reality and lives in an illusory world.

Leaving reality into the virtual space of the Internet — an attempt to hide, to get out of total control — the opportunity to realize oneself in the Internet — it is another danger that awaits the modern person. To live in a great global multi-national and decentralized communications network, and to feel caught halfway through, is a direct indication of developing new forms of cognitive orientation which are consistent with the New Global and Local hyperspaces.

Informational technologies, while helping to bridge spatial and temporal boundaries, reduce the role of traditional government structures. In such a situation, the nature of communication between those people who are the part of the global network is changing. The role of ultra-fast and ultra-long-range forms of communication is dramatically increasing in the network society, and the Internet becomes an important part of it.

The Internet, which has always been named as a global intelligence, plays an important role in the informational field. In the modern era, technological forms of control appear as the embodiment of the Mind itself, aimed at the benefit of all social groups and at the satisfaction of universal interests. In the emerging informational society, information, information resources, knowledge, in particular, posted in the Internet, become a necessary resource for social and individual development, the core of the dominant form of rationality that allows one to get concrete results in a wide range of areas of activity.

Under the new conditions, people are increasingly dependent on the network. Today, when a "person of the network" has any questions, he makes the request not to others, but to the network — to find out answers [9]. From this moment we can note that the contradiction of the human's situation in the global network: on the one hand, he gets more opportunities for self-expression, and on the other hand, he depends on the informational flows of the network. So every confrontation seems irrational, and any opposition is unthinkable.

Modern man, being in the midst of an abundance of almost unorganized informational flows, very often unable to resist the influence of the information directed at him.

Naturally, such a radical transformation of the original background of civilization cannot pass without a trace for the inner world of the individual. Humanity begins to be divided for those people who know how to operate with knowledge, how to receive, store, process and use information with the help of the latest computer technologies, and for those who do not know how to do it. Researchers often note that the number of people who suffers from depression is increasing constantly, as since people cannot adapt to the ever-accelerating rate of changes in their life.

The prophetic visions of H. Marcuse are traced in the informational society. The author, bearing in mind the developed form of industrial civilization, wrote, that it reigns comfortable, calm, moderate and democratic non-freedom — the evidence of technical progress. Indeed, what could be more rational than suppressing individuality in the process of socially necessary but suffering-related activities, or merging individual enterprises into more efficient and productive corporations ... or cutting down on prerogatives and national sovereign rights. ... There is no denying that such development should be considered as prospective [10].

E. Fromm rightly believed that the achievements of science and technology can't be good or bad themselves, it all depends on their application. "Computers should become a functional part in a life-oriented social system and not a

cancer which begins to play havoc and eventually kills the system. Machines or computers must become means for ends which are determined by man's reason and will". [11] Indeed, obtaining and learning the information are the important means of personal development. New ways of processing and transmitting of the information through computers is a tremendous achievement of the human mind. But this achievement, like many others, is ambiguous: it can serve to improve the individual and contribute to the consolidation of humanism, and can reinforce the alienating tendency by subduing a person with a new social force.

IV. THE GLOBAL NETWORK AND THE FORMATION OF "HUMAN-COMPUTER"

Above all, it is concluded that a new person is being formed within the global information network. Similar to the human characteristic given by the French philosopher of the XVIII century — Julien de La Mettrie in his work "The Machine-Man", it is possible to call a human of the information technology era of XXI century — "The Computer Man". This analogy is based on a new emerging information reality. However, the computer is programmed from the outside, it is logical and rational, while the person is not only rational, he is also emotional, illogical, etc. But the comparison of a person with a computer is based on the fact that the thoughts and actions of a person, who belongs to the informational culture, are programmed by information on the network; his unconscious will be formed eventually under the influence of the information flows of the network [12].

The expansion of modern technologies into all spheres of social activity is accompanied by a sense of hopelessness of people who encounter a "computer breakthrough" towards "infinite perfection". That poses a danger to a fulfilling life of a human being. Maximum production and maximum consumption turn a person into a cybernetic mechanism which lives in cyberspace. "A man is gradually transformed into a narrow-minded subject who is in love with a machine, more than with a life itself". [13]

Destruction is carried out by the method of manipulating the influence of the information system on human consciousness by undermining the cultural foundations on which is the background of human consciousness for a critical perception of the information. For this purpose, the information system creates a virtual world built by information manipulators with guaranteed cultural hegemony of the values needed by the ordering party. It is the narcotizing imaginary world, and the immersed human consciousness becomes autistic. It knows that lives amongst fictional images, but obeys the laws of this world [14].

The main method of the manipulating influence of the information system on human consciousness, which is aimed at destroying its norms and values, is to appeal to hidden, suppressed, unhealthy instincts and desires that nest too deeply. The human consciousness must be corrupted and artificially exacerbated by unhealthy interest.

It is possible to say that our society transforms into a society devoid of humanity, destroying human nature itself. It is obvious that the spiritual impoverishment of mankind lies in the catastrophic lag of spirituality from the economic and technological progress of civilization, the true purpose and vocation of which are concluded in the self-realization of the creative forces of each person. Also, the purpose is in creation of conditions for human's dignified life, in the achievement of mutual understanding between people and in the harmony of human relations. The problem of spiritual poverty of society was noted by C. Jung, who believed that "as scientific understanding grows, the world becomes dehumanized" [15].

The world wide web of the Internet unites those who have access to it and cuts off those who are deprived of it. In this way, two parallel communication systems are created. "One is for well-to-do people, with a good education, with modern tools of communication, which give an opportunity to obtain, quickly and cheaply, large volume of information. Another system is for those who do not have such a communication. They are forced to use the old information methods and ways, they receive outdated and therefore — less valuable information" [16]. As a result, the vast majority of the world's population, which does not have adequate income, education and access to modern communicative tools, is marginalized increasingly by technological and economic progress. It is the level of information technology that today determines many possibilities in spheres of politics, economic, etc.

One of the acute problems of modern society is the "crisis of identification." The number of people who do not think about their social belonging to a certain family, circle of friends, settlement, status, professional group, ethnicity or nation increased in two or three times. In this sense, the world of modern society is collapsing not only at the macro level, but also at the level of micro-relations and group relations. A person loses himself in society, feels detached, disconnected from social structures, break with reality and, as a result — feels disappointment and loneliness.

Due to the organization of the massive impact of media and informational technology, a person begins to identify himself with individuals or groups, contrary to their own social and cultural affiliation. Political and social myths force him to identify his interests with the interests of groups and people whose goals don't correspond with his own. The man seems to be split: in his real life he still stays with his reference group, and his consciousness is inscribed in the system of completely different views, interests, representations, models of behavior, which sometimes are completely alien to him.

V. PROBLEMS OF DIGITALIZATION

Russian President Vladimir Putin has set the task of developing the "digital economy." The economy has always dealt with digits. What is the essence of "digitalization"? Only in technology! The essence of the laws of the economy cannot be changed by a "digit." Even the new paradigm — the "informational economy" (J. Stiglitz) — does not change the essence of the economy. The technologies of economy analysis and management are changing in the context of the dialectic of real and virtual meanings of information. Obviously, the answer should be found in the development

of a new stage of evolutionary (although it is called in science, revolutionary) development for both society and economy, i.e. informational civilization, informational society, with rapid development of electronic, but actually — ommunicational and informational technologies.

Experts educate us in the Internet that the "electronic economy," a network, digital environment that exists due to digital telecommunications networks (the World Wide Web, the Internet), creates the ability to carry out any economic environment activities. Any?! It means — including fraudulent, speculative?!

In our opinion, the electronic economy can exist due to the digital electronic networks, and without them can't. Networks are not the economy; they are only tools, tools for the development of economy.

The economy always develops according to the objective laws of the functioning of nature and society, according to the laws of interaction between them. Digital networks are just information technologies for economic development.

According to recent research, further automation of production, as one of the goals of the digital economy, will lead to job losses from 12 to 41% of personnel. In addition, the mankind could be struck, as V.D. Popov and S.V. Drozdovsky write: "It turns out that we could be struck by "electronic degradation" before the advent of artificial intelligence". According to scientific forecasts, by 2020 it will be needed about 40 million specialists of the highest qualifications (here we are talking about specialists in the "digital economy").

The question arises: what should a lot of people in the non-digital sphere do? In this connection it is appropriate to recall the conclusion of the famous scientist — physicist S. Hawking from his book "A Brief History of Time": "The development of full artificial intelligence could spell the end of the human race".

In this book, he predicted three variants of the "end of the human race":

- The likelihood of nuclear war;

- Unmanageable activity of artificial intelligence;

- Creating a constructed virus in the context of an information and economic war [18].

As V.D. Popov and S.V. Drozdovsky write, "Genetics, geno-informatics, genetic engineering — they are already able to create a genetically modified virus as a weapon against people. And it is quite possible that hackers can create a computer virus... The dialectic of human development and technology is such that man making discoveries, inventions, subsequently mankind directs, uses them against itself. And this process looks like no one on Earth and in Cosmos will not be able to stop. Probably, the electronification of human life, the invention of digital attributes, attractors, technologies — this is the real future of ours" [19].

VI. CONCLUSION

Despite all the positive moments of the informational society, its negative tendencies have already emerged and are gaining momentum. This has an undue impact of media on the society (especially, advertising); undesirable interference of information technology in people's privacy; the difficulty of adapting to the environment of the informational society; the danger of a gap between the "information elite" (people who develops informational technologies) and ordinary consumers.

In order to prevent man from losing his nature and self-destruction of mankind, it is important to solve theoretical problems. The nature of information and its metamorphosis in the technological world include the virtuality in natural and artificial reality, and human transformation in an information society; they both require to be studied. In practice, it is necessary to remember the words of J.C.F. Hölderlin: "But where there is danger, a rescuing element grows as well.

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