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DIGITAL FUTURE FOR MAN AS A SOCIAL BEING

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Abstract

The purpose of the study is to consider the non-obvious and dangerous consequences of the process of digitalization of social life and to propose some means of their neutralization. The article raises such questions as: What is the ultimate goal of the creators of artificial intelligence: freeing natural intelligence from routine work or replacing the natural intelligence of socio-cultural subjects with artificial intelligence of technical devices? What are the limits of permissible facilitation of intellectual activity? How does the steady replacement of the natural and socio-cultural environment of mankind affect the formation of human intelligence and socio-cultural qualities? Today it is not enough to say that robots should not harm human beings. The leitmotif of humanitarian arguments about the digital future of mankind should be the idea of preserving not only the natural environment, the animal and plant world of the Earth, but also the human being as a biological species and the subject of socio-cultural activities. Really competent specialists for the digital society should receive higher education, which makes it possible for them to understand that social life is a result of activity and a form of existence of socio-cultural subjects, but not of virtual characters that appear and disappear “by the click” of IT-specialists. The objective of higher education for digital society is specialists capable to create such technologies, the use of which requires development of socio-cultural qualities of a person.

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1. Introduction

Undeniable advantages of the digitalization of society for a person as a subject of culture are that IT-technologies:

- optimize the human environment, freeing mankind from many tedious mental and physical actions;
- create conditions for the endless expansion of communication and sources of information;
- contribute to the formation of new competencies and the development of human abilities (Castells, 1996).

It is obvious, that digitalization of the educational environment provides training of specialists capable of various types of socio-cultural activities in the digital society and competitive in the labour market. Only highly developed material and technical base, an integral element of which IT-technologies are, provides scientists with the use of modern methods of experimental research of natural phenomena and makes it possible for engineers to construct the high-tech means of material production. No less obvious, that in the process of studying the humanities it is necessary to familiarize students with the products of material culture, historical monuments, literary texts, works of art, etc. – with all those, that can be digitized and demonstrated anywhere in the socio-cultural space thanks to the Internet (Chernyakova, 2019a; Semenova et al., 2019).

However, the main task of all representatives of the system of higher education today is not to list the obvious advantages of digitalization of social live, but to explain its non-obvious and dangerous consequences. It seems that not a possible collision with an asteroid or a world war, but an irresistible urge to self-destruction is the main threat to humanity today. The number of people changing their gender and appearance is constantly growing all over the world. The desire to improve nature, along with advances in medicine, plastic surgery and pharmacology, grows into a hatred of the species characteristics of *Homo sapiens* and leads to their destruction.

But the most crushing blow is dealt to the socio-cultural qualities of a person. Contrary to the romantic hopes of scientists for the emergence of a “knowledge society” as a result of the development of new technologies (Drucker, 1969; Machlup, 2014; Masuda, 1980; Stehr, 1994), humanity has become neither smarter nor more educated. Technology has always been and will always be the embodiment of knowledge. However, scientific knowledge is the property of professional groups of scientists, engineers and specialists, but does not affect significantly the level of knowledge of other members of society. Knowledge of ancient mathematicians or astronomers is available to modern mathematicians and astronomers, but was not obtainable to ancient merchants, warriors, or artisans, as is not obtainable to modern economists, doctors, or lawyers. Moreover, technology has already led to the new situation when many people have ceased to be carriers not only of special professional knowledge, but also of common sense.

It seems that science fiction writers have always been fundamentally wrong when describe future wars between people and machines, because they represented the future man as a highly intelligent human being who created the world of robots and led the fight against rebellious specimens not just on equal terms, but from the position of absolute superiority. In fact, even now man does not have any

superiority over machines in the performance of the functions for which technical devices were invented, and by the time the artificial intelligence reaches its self-programmed heyday, human natural intelligence might finally degrade.

Throughout the previous history of mankind practical activity – from obtaining food with the help of tools to collecting empirical data in the experimental science – was the basis of the direct connection of man with the world around him. With the development of digital technologies humanity steadily moves to a technical level of development at which technology ceases to be the means of human development as a socio-cultural being.

2. Problem Statement

One of the most important problems in training specialists for the future digital society is that nowadays experts in the field of IT-technologies do not realize that the downside of improving artificial intelligence is the exclusion of natural intelligence from the relevant areas of activity.

Modern technologies do not just free people from hard physical labour and tedious mental activity; they displace the direct practical and sensory interaction with the surrounding world from the life of a person. The main danger is that artificial intelligence, in opposing to all other means of labour, ceases to be an intermediary between man as a subject and an object of his labour. Artificial intelligence makes a person an unnecessary link in the production process. Each new step in the development of IT-technologies leads to degradation and, ultimately, to the disappearance of such human abilities and qualities that turn *Homo sapiens* from a biological species into a subject of culture.

3. Research Questions

To prevent dangerous consequences of the process of digitalization of social life and of training specialists for the future digital society we should answer to such questions as:

What is the ultimate goal of the creators of artificial intelligence: freeing natural intelligence from routine work or replacing the natural intelligence of socio-cultural subjects with artificial intelligence of technical devices?

What are the limits of permissible facilitation of intellectual activity?

How does the steady replacement of the natural and socio-cultural environment of mankind affect the formation of human intelligence and socio-cultural qualities?

4. Purpose of the Study

The purpose of the study is to consider the non-obvious and dangerous consequences of the process of digitalization of social life and to propose some means of their neutralization.

5. Research Methods

The research is based on the modern studies of society, attributes of sociality and the development of IT-technologies. In the process of studying the non-obvious and dangerous consequences of the

process of digitalization of social life and proposing the means of their neutralization pedagogical experience and the methods of content and logical analysis, interpretation, comparison, generalization and theoretical deduction were used.

6. Findings

6.1. Risks and dangers of digital society

Whatever advantage of digitalization we take, each of them is obtained at the cost of irreparable losses in all attributes of sociality: consciousness and articulate speech; the ability to create objects of “the second nature” and to act on the base of social norms (Bylieva et al., 2018). But in the absence of at least one of the attributes of sociality: consciousness, the ability to normative regulation or productive activity – natural intelligence cannot develop.

Creation of material objects as the means for productive activities in the natural world has led to fundamental transformations in the psyche and the system of relationships between biological beings, turning them into members of the emerging society.

Creation of virtual products for virtual consumption separates man from both natural biological and genuine socio-cultural existence. Producing activity as an attribute of sociality is present only at the stage of creation of digital technologies and is completely absent at the stage of their use. The need to develop the mental abilities that provided creation of means of production and consumption in the past disappears along with the need to create these means. The whole essence of IT-technologies boils down, ultimately, to the displacement of man not only from the sphere of production of material goods, but from the public social activity as well.

Virtual communication is not just an ersatz communication; it is a communication that is not capable of forming a sound attitude to the real world (Baeva et al., 2019).

Even today's level of digitalization of public life has proved to be sufficient to destroy the links between parents and children, students and teachers, between colleagues or housemates, etc. The distance between people increases with such speed that only those who consciously seek to destroy social ties as such can be unaware of all the harmfulness of the processes which are taking place (Herring et al., 2013).

The destruction of real socio-cultural communication leads to the growth of depression (Brooks & Longstreet, 2015; Fox & Moreland, 2015) and domestic aggression; the collision with not the avatar, but with a real person reveals the lack of basic communication skills and the oblivion of all norms and rules of interaction between people (Emelin, 2017).

It is significant that the most advanced inhabitants of virtual reality consider it as a territory free from any social norms and rules without realizing that the presence of social norms is an attribute of sociality, the disappearance of which means the transformation of society into a herd of animals (Barlow, 2017; Grossman, 1995).

6.2. Real contact with the world as a kind of inoculation against dissocialization

Really competent specialists for the digital society should understand that it is impossible to form a subject of socio-cultural activity outside of live communication between people. No one can become a scientist, a humanitarian, an engineer or an economist outside of the real communication with

representatives of the relevant activities. Man as a socio-cultural being cannot be replaced by artificial intelligence. A person can be “replaced” only by another person as a result of natural changing of generations. But even in this natural process socio-cultural qualities are not transmitted genetically. It is impossible to become a carrier of natural intelligence outside of socio-cultural ties and relationships. The main of the incentives for human development has always been the need to use personal qualities in the process of real life of society, since normative regulation embodied in the structure and functions of society as an integral system of relations stimulate the development of socio-cultural qualities of a person.

IT-technologies by themselves do not contribute to the development of skills of operating with ideal objects, concepts, and meanings. The speed of gaining access to the physical carrier of information leads to the loss of such skills as note-taking, narrating, finding answers to specific questions in the process of watching and reading multiple sources. As a result people do not develop their ability to understand and interpret various texts, to “keep a distance” between texts and their own ideas. Searching for information is identified with searching for files, and printing out a text is perceived as gaining knowledge (Toropov, 2018).

In spite of the fact that the ideal phenomena cannot be digitized and that the nature of material carriers does not affect the perception of meaning, the distant learning destroys the very basis of the formation of the ability to understand the ideal content of material carriers. Distant learning demands the most accurate and concise expression of thoughts which creates a delusion of rigid connection between the ideal content and the linguistic form of its expression (Indyk et al., 2019). In addition, the constant stay in virtual reality and filling of consciousness with quasi-meaningful Internet information prevent the implementation of complex processes of mental activity (Berezovskaya & Shipunova, 2015). In students’ audience, brought up on texts from social networks and talk shows, the standard answer to any humanitarian question begins with the formula: “Each person has his own opinion about...” – which fits any object: culture, values, education, personality, etc. The “idol of one’s own opinion”, the worship of which is cultivated in modern education, makes modern students extremely naive and ignorant in the matter of knowledge.

As a result, significant changes in the world around us and the latest IT-technologies have made the consciousness of the new generation of students neither more developed, more free from the “idols” known since the time of Bacon, nor more flexible, more capable of independent thinking (Bruni, 2011).

The formation of professional competencies and soft skills that allow specialists for digital society to move freely in the space of cultural diversity requires the mastery of practical skills of dialogue with not virtual characters, but real people (Evseeva et al., 2017; Gashkova et al., 2017).

The ability to engage in dialogue is one of the most important competencies of a highly educated person (Darinskaia & Molodtsova, 2019). Just because of this the direct contact between a teacher and a student in the process of professional training is not an obsolete traditional form of education, but a necessary condition for real dialogue (Chernyakova, 2019b).

It is in the process of real, direct communication with each other that individuals learn and pass on from generation to generation the most fundamental skills, norms and rules of social life and at the same time develop symbolic means of expression, storage and transmission of social information. The most important of these means is natural language, articulate speech (Likhacheva & Gabdulchakov, 2019).

Only a live dialogue develops the ability to handle thoughts, ideas and concepts; allows demonstrating the mobility, fluidity and difficulties in expression of the ideal content of material carriers; gives an opportunity to recognize nonidentity of thoughts and language. Moreover, only the live communication develops the ability to express oneself in the word, to formulate ones own thoughts and perceive the language as a material system, outside of which the thought cannot be transmitted in the process of communication (Salnaia et al., 2019).

An individual is formed as a subject of socio-cultural activity, rather than as a biorobot, only in the process of joint activity with already formed subjects of culture. Only the actual activity in the real world is able to liven up the ideal content of cultural products. That is why the exclusion of the live communication between all participants of the educational process adversely affects not only the study of humanities, but the development of students as subjects of socio-cultural activities as well (Lyz' & Istratova, 2019).

The development and application of gaming technologies in education is one of the ways to counter the negative consequences of digitalization. Practical activity of students on creation of various material constructions allows to understand how the laws of nature act and to feel connection with the physical, instead of the virtual, world; develops skills of operating with various materials; promotes development of norms of real interaction with members of a group. Not only “manual” design, but also virtual design develop students' creative abilities; instill a taste for inventions in order to develop the socio-cultural environment of human habitation (Sazina, 2019). Ultimately, construction and design contribute to the development of the attributes of sociality: the ability to the conscious, purposeful and productive activity and to the interaction with other people on the basis of social norms.

7. Conclusion

Digital society of the future and the processes of digitalization of the educational space require scientists and humanitarians to determine their place in the coming changes and to understand the special role of different components of higher education in the training of specialists for the digital society.

Today it is not enough to say that robots should not harm human beings. The leitmotif of humanitarian arguments about the digital future of mankind should be the idea of preserving not only the natural environment, the animal and the plant worlds of the Earth, but, first of all, – the humanity itself as a biological species and a subject of socio-cultural activities.

Really competent specialists for the digital society should receive higher education, which makes it possible for them to understand that social life is a result of activity and a form of existence of socio-cultural subjects, but not of virtual characters that appear and disappear “by the click” of IT-specialists.

Future specialists for the digital society educated in science and humanities should understand that complete and final displacement of man from all spheres of the economy will inevitably lead to the degradation of the attributive qualities of man as a socio-cultural being.

The objective of higher education for digital society is specialists capable to create such technologies, the use of which requires development of social and cultural qualities of a person.

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