



MSC 2020
**International Scientific and Practical Conference «MAN. SOCIETY.
COMMUNICATION»**

MAN IN THE MEDIA TECHNOLOGY INDUSTRY

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Abstract

The article shows that the modern media environment is a qualitatively new stage in the transformation of the media environment, since there is not only an intensification of the level of development of science and technology, new structures of social life and ways of organizing production, but also the formation of new forms of sociality, understanding of human nature and his transformation. The influence of media technologies on the social environment is analyzed and it is shown that developments in the field of nanotechnology, robotics, memristor electronics, which penetrate all levels of living and non-living matter, become global threats. NBICS technologies set a new strategy for the development of civilization, and their potential consequences require a humanitarian reflection on both the prospects and the threats to its implementation. A human himself becomes a witness to a new evolutionary state of civilization and is transformed under the influence of a complex of modern media technologies. It is proved that media technologies are changing the everyday life of people, their communication, the way of their direct personal being, and the human world under the influence of media technologies, media socium and media culture is transformed into his media world. The socio-humanitarian functionality of digital media networks as digital mediators is revealed and their influence on the social-natural environment of human habitation is characterized.

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Keywords: Human media network transformation, media technology, media technology industry, media technology revolution, posthuman



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1. Introduction

The study is relevant despite the significant progress of the sciences studying the formation of the media world; modern science is not able to predict the specifics of the existential situation that is emerging for NBICS-technological civilization due to media technology. The prospects for human media network transformations are largely uncertain and often difficult to predict. Gadgets that provide constant connection of users to global computer networks of inter-human and inter-machine communication change radically all areas of cognitive-transformative activity of people. Today we do not know which image of a person will be formed by the new computer network media and will replace the image of the current person.

2. Problem Statement

The emergence and rapid progress of the media technology industry has led to significant changes in understanding the position of human in the world. In the context of the media-and-philosophical approach, a person is interpreted differently than in the framework of biological anthropology. As the media sphere into which human being plunges becomes powerful, it is experiencing more and more cardinal transformations. How exactly does a person manage powerful electronic media? To achieve what social and humanitarian goals are media technologies used today?

3. Research Questions

To identify changes occurring with a person in the modern media environment; to analyze the influence of media on human being in modern civilization.

4. Purpose of the Study

To outline the changes that occur with a person in the media environment created by the media technology industry.

5. Research Methods

Research methods of the study is the general scientific principles of systematization and generalization of sources and the factual base of research on the problem of human changes under the influence of modern media and the development of tools in accordance with the characteristics of the subject, object, theoretical research in high technology. The system-structural method is used to analyze the development of media philosophical thought and the vectors of the formation of media philosophy. Methodological pluralism, bridging the gap between the object and the subject of knowledge are used in the analysis of the influence of modern media on human being. Modern comparative methods form the methodological base of the philosophical and anthropological analysis of the formation of the modern media environment, its impact on society and the whole complex of bio-psycho-socio-anthropological dimensions of a person.

6. Findings

The media environment of machine interaction is formed around modern human. The devices surrounding a person become more and more functional and independent, and their integration into various networks, of course, leads and will lead to much more noticeable and qualitative changes not only in the technosphere, but also in the sociosphere, forming their symbiosis – the media sphere. In the field of information technology and computer science, research is underway related to the development of the concept of a reasonable environment based on intelligent systems. By creating numerous media artifacts, a person increases his dependence on them and is practically unable to live in the natural world, without having the means to provide his already medially oriented needs simply and quickly.

The study of brain activity and artificial intelligence projects are two complementary strategies in revealing the functioning mechanisms of the human brain, mind, and consciousness (Reeves et al., 2015). The emergence of the term “connect” is associated with the emergence of yet another media science – connectomics – a computer analysis of the structure of natural neural networks, mapping of neural connections. Due to the development of connectomy, scientists expect to get a multi-layer map of the brain, which will allow us to analyze the interdependencies between a person’s genotype, his behavior and neural connections.

Nanotechnologies not only expand the boundaries of human cognitive capabilities, but also create conditions for total control over society and a human. “Regarding nanotechnology, there are already pessimistic and even alarmist warnings that new things and changes in the usual way of life can lead to the shattering of the traditional foundations of society” (Beilin, 2014, p. 269). At a certain stage in the development of technologies enhanced by artificial intelligence, systems may appear in the media environment that will no longer simply implement the “classical” data processing technologies, but will be able to integrate seamlessly into the human environment. There may come a time when the intellectual component will become an integral part of the whole surrounding reality, and the media will merge with the natural environment, which will form the basis for future projects to intervene in the work of the brain, which are quite officially implemented for medical purposes (Beilin et al., 2018b). Naturally the question arises: what are the risks of using these developed technologies for non-medical purposes (for example, provoking psychosomatic disorders and manipulating people) and what should be the measures aimed at preventing such use of these technologies?

The development of media technologies creates the prerequisites for solving a number of medical problems. So, the development of nanorobots, which will be needed in order to track the activity of each neuron, can become a locomotive for medicine. How will this affect a person, how will he change in new nanorealities when nanomachines will be used for medical purposes?

Large-scale consequences threaten the creation of neuromorphic computers that mimic the functions of the human brain. Such a danger is ignored in the context of the “new media technology race”, which highlights the rapid development of the cognitive potential of artificial devices. Cognitive computers will eventually be able to compare in their cognitive potential with humans and expand human capabilities. Individual capabilities of a person in the knowledge of the external world and the internal environment of the body are limited and are determined by the sensory organs that have developed during evolution.

Ensuring a high level of autonomy of such devices and modeling the mechanism of the human sensory system led to the intensive development of sensory technologies. Research in this direction is focused on the creation of devices that allow obtaining information on the properties of various media in the form of an electrical signal. The human sensor is simulated by the work of analytical devices operating on the principle of biosensors (Cheshko, 2019; Cheshko & Kuz, 2016; Cheshko et al., 2018). The practice of using sensor technologies gives rise to a new problem field of media philosophical reflection. In the future, as adherents of NBICS technologies see him, media technologies can give a person the opportunity to modify his body and social environment. Aristotle was the first to classify the five senses of man in his work "On the Soul", relaying the ideas of ancient philosophy about how a person perceives reality (Aristotle, 1976). Biological sensory organs provide a person with opportunities to cognize reality and underlie indirect interaction with the surrounding and created reality, understood as mediators of individual use. "Sensory systems, or sensory organs (in the old, more well-known terminology), provide the body with information about the environment and the internal state of the organism itself" (Varfolomeev et al., 2000, p. 21), which defines the boundaries of a person's sensory experience when using only their own sensory system. Specialized receptor cells perceive and, through intermediate neurons, encode and transmit sensory information electrically to the brain. After processing the received message, it is written to the memory and executive commands are formed (Kyshtymova et al., 2018).

The information environment generates a number of technologies that can significantly expand the human sensory experience (Cheshko et al., 2015a,b). There is much in common between sensor systems and biosensors under design. Therefore, "the question arises: is a person able to go beyond the sensory possibilities given to him by nature? Can he, directly using his senses, register electromagnetic fields not only in the visible range, but also in the field of ultraviolet, x-ray or radiation?" (Varfolomeev et al., 2000, p. 22). The answer to these questions is related to how far the practice of human interaction with its media expansions will go and how the practice of their penetration into the human body will be justified.

Wireless sensor network as a self-organizing network of many sensors and actuators interconnected through the implementation of unique identification, becomes the engine of development of the M2M environment (Chayko, 2017). The sensor devices that form the sensor network are an integrated platform that combines the capabilities of touch functionality based on the operation of external sensors that record specific parameters or their combination with the computing capabilities of computers and communication devices (Krämer, 2017).

Promising IT technology, which is being developed to increase the comfort of a person's life, gets the opportunity to independently configure, enter into communication and even influence objects and processes. Accelerating the pace of the technological race leaves less time for reflection on the consequences of the development of media technologies to their creators. Scientists, with the active support of IT companies, are working on the creation of biochips capable of expanding sensory abilities to perceive the world. Such research opens up new prospects for pharmaceutical development and the manufacture of biological products to solve a number of medical problems.

At the current level of technology development, the computer is already able to analyze the current situation, analyze the situation and offer people options for possible further actions, and there is no fundamental difficulty in the computer performing these actions autonomously (McCarthy, 2019). The

technology of sensor networks, consisting of many independent miniature autonomous devices with wireless capabilities, has been developed actively in recent years to achieve the ability to self-organize in a network and interact with each other and with the “center”. How safe will the functioning of such centers of self-organizing motives and actuators be, to whom and how much will they be controlled, on what principles will their interaction with human be based – the source of present and future existential anxieties of mankind.

Having medical grounds for use in the human body, microscopic gadgets can become part of the human sensory system, allowing you to more fully assess its condition, restore functionality and / or expand its sensory capabilities. For example, scientists from Bath University in the UK managed to develop the latest miniature chip the size of a fingertip. The most interesting thing is that, despite its small size, the development is able to almost completely duplicate the work of human nerve cells. It is assumed that in the future such microcontrollers will be able to restore the activity of the human spinal cord (Mi, 2019).

The introduction of autonomous and self-organizing moto technology into the human brain is fraught with unpredictable consequences. In the framework of the strategy of “improvement” of a person, correction of biochemical processes in the human body and the addition of the human body with technological sensors can be used. For example, using the stem cells of an African Spur frog, the first “living biorobots” of about 1 mm size have already been created, which are able to move to the target, carry tiny loads, do without nutrition for a long time and recover independently (Kriegman et al., 2020). If advanced military technology is adopted by the military, the consequences could be fatal for all of humanity. Humanity itself as a source of existential experiences can be permanently destroyed by new technology, and together with humanity, the person himself will disappear, which will become a creature that will no longer be a person in the classical sense of the word (Beilin et al., 2018a). The threat to humanity with the development of such new technologies is becoming more and more obvious, although at first glance it seems fantastic to most. However, with the development of intelligent technologies, this threat takes on an increasingly realistic shape and already now requires the development of a special policy to neutralize it.

7. Conclusion

The creation of smart networks of sensor devices and their autonomy, together with an increase in the comfort of life and their widespread use, cause a change in the existing social reality, its technicalization. The use of sensory technologies without developing preventive security measures in projects to enhance human sensoryism and penetration into the human brain threatens to transform the bio-, psycho- and socio-spiritual nature of human. “Intelligent technology” not only expands the boundaries of a person’s cognitive capabilities, but also creates the conditions for total control over society and a person. Technology today is increasingly being used to control human consciousness, creating the fundamental possibility of changing the person himself – as radical as changing his environment and lifestyle. At a certain stage in the development of artificial sensory technologies enhanced by intelligence, systems may appear in the media environment that will not only implement data processing technologies, but will also be able to integrate seamlessly into people's environment. There may come a moment when all surrounding reality will be permeated with such intellectual matter, and the media will merge with the natural environment.

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