

Consciousness In The Context Of Computer Virtual Technologies: Cyberspace And The Internet

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ABSTRACT

The purpose of the study is to reveal the features of the formation of a new social and informational space of our time and the work of consciousness under the influence of information and communication technologies. The author tried to present the work of thinking in the context of the virtualization of modern society. The scientific novelty lies in the interdisciplinary consideration of the issue of virtualization of thinking with the involvement of the works of modern philosophers, sociologists, psychologists. As a result of the study, the author came to the conclusion that the process of virtualization of thinking is the process of reflecting the simulation of social space up to the acquisition of the status of the only and self-sufficient reality by the sign sphere

Keywords

virtual reality, consciousness, cyberspace, information and communication technologies, internet, virtualization, simulation, temporality

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Introduction

The problem of consciousness has always attracted the close attention of philosophers, for determining the place and role of man in the world, the specifics of his relationship with the surrounding reality, presupposes an elucidation of the nature of human consciousness. For philosophy, this problem is also important because certain approaches to the question of the essence of consciousness, the nature of its relationship to being, affect the initial worldview and methodological guidelines of any philosophical trend. Naturally, these approaches are different, but all of them always essentially deal with a single problem: the analysis of consciousness as a specifically human form of regulation and control of human interaction with reality. This form is characterized, first of all, by the allocation of a person as a kind of reality, as a bearer of special ways of interacting with the surrounding world, including managing it. Numerous problems associated with the study of the subject's consciousness are so little studied or not studied at all that the more we penetrate into them, the more clearly the awareness of our ignorance and understanding of the depth and scope of this issue appears.

Such an understanding of the nature of consciousness presupposes a very wide range of issues, which becomes the subject of research not only in philosophy, but also in special humanities and natural sciences: sociology, psychology, linguistics, pedagogy, physiology of higher nervous activity, and now also semiotics, cybernetics, informatics. The development of special scientific research stimulates the growth and deepening of the actual philosophical problems of consciousness. So, for example, the development of modern informatics, the creation of artificial intelligence, the associated process of computerization of human activity made us consider the issue of the essence of consciousness, specifically human capabilities in the work of consciousness, the optimal ways of interaction between a person and his consciousness with modern computer technology and generated virtual reality.

It is consciousness that distinguishes the created world from reality. The process of creating realities is endless. We believe that any educated reality can be called virtual, and such a virtual reality, under certain conditions, becomes generative for another. Consciousness is the basis of this process. The processes and phenomena of reality are unthinkable without projection into the virtual world. Consequently, a person is always a person who masters virtuality and reality, living his life "here and there", in the world of reality, in which his body is located and in the world created by his consciousness - the world of the possible, the virtual.

Human thinking in the usual sense of its understanding is the thinking of a person, therefore it is personified, subjective and individual. And although a person's thinking is based on universal principles and laws of evidence, correctness, consistency and semantic meaningfulness, nevertheless, it is colored by the peculiarities of the personal worldview, psychotype, character and other personal characteristics. Internet thinking and, if I may say so, network logic have a different specificity. When the physical world of matter fades into the background, the perception of the world fundamentally changes. By controlling the degree of connection of consciousness with the surrounding world, a person can significantly expand his perception and even create new objects of reality that did not exist before.

Today virtual reality is not only a new technology that has no spatial boundaries and time frames. It is also a new information space, and for many it is a genuine environment for their daily life. Humanity has isolated its being from the factors of reality, and virtual reality has become one of the most important tools for this isolation. It overcame physical space and time, which means it crossed out the inviolability of nature. It can be argued that virtuality manifests itself not only as a technical means, but appears to us as a socially new phenomenon, where the emergence of new forms of being becomes the center. This plurality appears before a person in various settings of consciousness and forms of activity. Any attempt to find one single space, a reality

accepted by all, is doomed to failure. Multiple realities is the motto of modern society.

The nature of the qualitative changes in social life due to the development of computer technologies allows us to state the beginning of a new era in the development of human history - the era of the dominance of networks, which expands human capabilities and influences the formation of a new form of communication, complicates the process of forming identity as a result of socialization, and changes the way of thinking of a person.

As he wrote back in the middle of the XX century. M. McLuhan, "the main feature of the electric era is that it creates a global network, in many ways similar to our central nervous system", which forms "a unified field of experience" [1]. Therefore, the purpose of this study is to reveal the features of computer virtual technologies that allow transformations of consciousness into digital reality.

Literature review.

While analyzing primary sources, we are facing a wide range of views on the problem of virtualization of the world and society. The world of digital communication, virtual reality and their influence on consciousness, as a specific object of special scientific research, has a short history. The names of N. Luhmann, M. Castells, M. McLuhan, A. Touraine, W. Eco and many other modern researchers can be named as representatives of this direction. In their work, digital media are becoming one of the most important tools for orienting a person in the world and for people to interact with each other. Almost every theorist of the postindustrial direction has such concepts as information society, virtual reality, virtual communities, informatization, information revolution, virtual, information network, but often they remain without definition.

The analyzed series of works allows us to conclude that there is no single line when considering the issue of the existence of cyberspace and virtualization, which complicates the perception of this phenomenon and its description in specific categories.

Research Methodology.

The turning point in the emergence and study of new types of reality was the emergence of computers as a means of constructing the objective world and information environment as a field and product of the application of information technologies. In the dynamics of comprehension of everyday life, the emergence of computers looked like the emergence of a new reality, a new objective environment, a new sphere of human activity and the accompanying meanings. In addition, computer networks began to perform additional, non-specific functions, in particular, they became a tool for confirming the evidence of the existence of many manifestations of objective reality. According to the famous Spanish researcher of modern civilization processes M. Castells, the concept of computer virtual reality turned out to be key in comprehending the meaning of the information age, both in general and in its aspects: social, political, anthropological, psychological, technological, etc. It was with the advent of computers that in his opinion, "a new

stage in the development of society begins, in which identities are "washed out" and the virtuality is recognized as a formative and integral attribute of the new world order," and the emergence of new types of reality fits well into the emerging order of "space of flows" and "timeless time" [2]. It seems that this phrase of M. Castells is the key to the construction of a vector of philosophical, methodological and general theoretical studies of new types of reality: cyberspace, virtual, augmented, digital reality, etc.

Analysis and results.

At the present stage of information technology research, the concept of virtual reality largely overlaps with the concepts of cyberspace and the Internet, which sometimes leads to terminological confusion.

So, according to R.I. Vylkov, "each type of virtual reality has such an essential characteristic as spatiality. Cyberspace acts as a condition for the possibility of spatial characteristics associated only with the types of computer virtual reality" [3].

The word "cyberspace" appeared in W. Gibson's fiction in the early 80s. Cyberspace and other derivative words with the prefix cyber are based on the word "cybernetics", introduced in 1948 by N. Wiener. The cybernetic approach was formulated as a science about the general laws of control processes and information transfer in machines, living organisms and society [4].

The metaphor of cyberspace, as noted by A.E. Voiskunsky, implies the presence of a certain virtual world, presented in the mind and filled with information stores [5]. Sometimes cyberspace is viewed as hypertext, as a verbal structure, video and audio fragments are embedded in it. Its main characteristics are coherence, structuredness, saturation with heterogeneous connections, meaningful completeness. Cyberspace is a socio-technical system that includes blocks of information and people who create verbal messages and texts of varying degrees of truth, details and responsibilities, realistic or even fantastic images that are misleading, images of fictional creatures, communities that you can join.

The American philosopher M. Heim outlined his understanding of cyberspace, which resonates with the ideas of W. Gibs. on. For him, cyberspace is a large computer network, in which virtual realities are rolled up, this is a set of orientations. The points, by which we find our way in the midst of an inaccurate amount of information [6].

I.A. Negodaev's opinion that computer virtual reality is an interactive graphical representation of cyberspace is legitimate [7]. But the fundamental difference between cyberspace and virtual reality, as T.A. Kirik states, is that "virtual reality begins where a person enters cyberspace" [8]. Only his ideal consciousness is present here. Ontologically, cyberspace is not a physical reality, and therefore, the laws of the material world do not have their power in it. The structure of cyberspace does not imply the beginning and the end, there is no centralization, order and symmetry. It consists of many chaotically intertwined, periodically dying and regenerating, unpredictable shoots in their development. The rhizome metaphor is the most suitable for describing its structure.

The use of the term "rhizome" to analyze cyberspace and the Internet is due to the fact that in modern philosophical

literature there is no alternative concept that could just as clearly convey the essence of network technologies and the features of communicative virtual reality. This term was borrowed by J. Deleuze and F. Guattari from botany, where it meant a certain structure of the root system, characterized by the absence of a central taproot and consisting of many chaotically intertwined, periodically dying and regenerating, unpredictable shoots in their development [8]. Later, this category became widespread and became one of the most important in poststructuralism.

In our opinion, cyberspace is an abstract, symbolic concept used in social, humanitarian and other areas of modern scientific knowledge to denote the functioning of information and communication technologies, which allow creating extremely complex systems of actors' interactions in order to obtain information, exchange and control it, as well as implementation of communications in the context of many different networks.

Modern cyberspace is characterized by:

1. Lack of geographic localization (computer events and processes are transboundary, they do not occur in individual cities and countries where computers are located, servers are registered, program developers or session participants live or work);
2. intersubjectivity (computer developments and processes today are often the result of joint parallel work in a network of many of its participants);
3. partial anonymity (part of cyberspace at this stage is difficult or impossible to subjectively identify);
4. polyfunctionality (affects all spheres of life of society);
5. superdynamic (changes extremely quickly, informationally unfolds); is a type of "rapidly growing system" (a kind of expanding information universe);
6. temporal multi-vector (provides staying in the present, as well as on various slices of the past and possible future);
7. relative independence (subject to material resource support, it can generate new micro- and macro-events without purposeful human influence).

I would especially like to dwell on the concept of virtual space and time. Virtual reality can be viewed as an analogue of the subjective reality of an individual. In view of the ambiguity of the term "virtual reality", one of the researchers of this concept, S. L. Katrechko, classifies virtual realities by the nature of changes in the objects that are in them, in space and time [9]. Cyberspace refers to a type of mental reality in which there are no spatial changes, but only temporary ones. While everything is more or less obvious with the concept of cyberspace, the issue of cybertime remains poorly understood.

Virtuality sets the field of possibilities, the field of uncertainty for real objects. Virtual reality is unexpected and unpredictable. Plunging into it, a person does not know in advance what awaits him in the virtual world, and, moreover, the consequences of its impact on the real world are unknown. On the one hand, virtuality constantly produces something new (physical interactions, different movements, real particles, or something else), and on the other hand, it generates randomness, unpredictability, and uncertainty. The very uncertainty is associated with the peculiarities of virtual space and time. Virtual space has a dynamically changing dimension and fractality, while virtual time has invariance and inversion. The dimension of

the computer virtual space (cyberspace) allows one-dimensional, two-dimensional and three-dimensional objects to be placed in it. However, existing computer technologies are already trying to create and place objects of higher dimension in this space [10].

As far as virtual time is concerned, its analysis can be carried out through comparison with real time. Virtual reality is a product of another reality – constant reality. Thus, it is necessary to consider two types of temporality: constant and virtual. Virtual temporality is in a subordinate position in relation to constant one. Constant temporality exists without virtual, the second, in turn, cannot exist without the first. Constant temporality is often described as continuous, and virtual, as opposed to real, as diskette. "Both virtual and constant temporality by themselves bear a continual character, which means a continuous flow from one moment to another. However, in relation to constant temporality, virtual temporality loses its continuity and becomes discrete" [11]. A virtual event can be restarted, started over, and is discrete and reversible. Here, attention is focused on a fact overlooked by many researchers, namely, in order to re-launch a virtual event, the subject is forced to return to constant reality and re-enable this event. Within virtual temporality itself, time is also continual, and events proceed continuously and irreversibly until we go out into constant reality in order to manipulate them. In the situation of the possibility of an exit and a new playing around of virtual events, the virtual space is deprived of existential properties.

Time parameters of computer virtual reality are set by human consciousness and mediated by computer devices. If the processes in nature proceed in real physical time, and the coordination between them in consciousness is formed within the framework of the natural setting of temporal perception, then when constituting virtual reality, it is possible to set any temporal scales and durations, convenient in terms of time course of events. As a rule, the flow of time in virtual space accelerates due to real reasons, this fact is associated with the enormous speed of information dissemination. In this case, virtual time has a noticeable effect on social time: under the influence of the first, the second also noticeably accelerates, more and more influencing reality, making it more and more uncertain.

With the spread of the World Wide Web (WWW) in the early 1990s, the term "cyberspace" has gained practical use to describe the online world in which the interactions of individuals and groups are carried out through electronic networks connected by information and communication technologies. M. Castells writes in this connection that a "communication hybrid" appears, bringing together places in physical space and cyberspace [12]. J. Barlow, one of the most active defenders of freedom on the Internet, writes that "cyberspace consists of operations, relationships and thought itself, forming a kind of wave pattern in our network of communications. Our world is everywhere and nowhere, and it is not where our bodies live" [13].

With the development of high-tech networks and the formation of a global network, the term "virtual reality" began to be applied to the electronic communication environment of interactions of this single conglomerate of networks.

“Virtual reality is an environment artificially created by computer means, into which one can penetrate, changing it from the inside, observing transformations and experiencing real sensations. Once in this new type of audiovisual reality, one can enter into contacts not only with other people, but also with artificial characters” [14]. In this regard, M. McLuhan's and T. Leary's guesses are very interesting that it is communication at the level of electronic (electrical) impulses that is the natural habitat of the human brain, in everyday experience limited only by sensory data coming through strictly separated channels of five organs senses in the apparatus of human perception [1].

Conclusion and Recommendations.

The Internet is becoming an integral part of the information space of the postmodern society and its importance is steadily increasing every day. The global network creates the necessary conditions for the formation of virtual communities, generates text formats of a new type, erases borders between states and, ultimately, builds around itself a specific form of culture - cyber culture within cyberspace. Summing up, it should be noted that the author tried to illuminate the problem of changing the consciousness of an individual who thinks in terms of the virtual world. Virtualization of consciousness requires the study of modern technologies and principles of influence, based on the specifics of virtual reality as a new socio-cultural reality that forms a person as a person, contributing to his adaptation in a complex global world

References

- [1] McLuhan, M. (2003). *Understanding Media: Human External Extensions*. M. - 400 p.
- [2] Castells, M. (2010). *The Information Age: Economy, Society and Culture: in 3 vol. Vol. 1. The Rise of the Network Society*. 2nd edition. Oxford: Wiley Blackwell. - 656 p.
- [3] Vylkov, R.I. (2009). *Cyberspace as a sociocultural phenomenon, a product of technological creativity and a projective idea*. Ekaterinburg. [Electronic resource]. - Access mode: <http://cheloveknauka.com/fenomen-kiberprostranstva-kak-filosofsko-metodologicheskaya-problema> (date of access 12.01.2021).
- [4] Wiener, N. (1983). *Cybernetics, or Control and Communication in an Animal and a Machine. / Translated from English by I.V. Solovyov and G.N. Povarova; Ed. G.N. Povarova*. - 2nd edition. - M.: Science;
- [5] Voiskunsky, A.E. (2001). *Metaphors of the Internet // Problems of Philosophy*. No. 11. S. 64-79. [Electronic resource]. - Access mode: <http://www.relarn.ru/human/cyberspace.html> (date accessed: 16.01.2021).
- [6] Heim, M. (1995). *Metaphysics of virtual reality // Research on the philosophy of modern understanding of the world*. M. Issue. I.
- [7] Negodaev, I. A. (2003). *Informatization of culture: monograph*. Rostov n/D. Kniga. - 320 p.
- [8] Kirik, T.A. (2007). *Virtual reality and its ontological prototypes*. Kurgan: Publishing house of Kurgan state University. - 134 p.
- [9] Katrechko, S.L. (2004). *Internet and Consciousness: Towards the Concept of a Virtual Human // Influence of the Internet on Consciousness and the Structure of Knowledge - M.: IF RAS*. - P. 57-71.
- [10] Ioyleva, G.V. *Virtual reality: structural and functional features and specificity of its impact on consciousness*. [Electronic resource]. - Access mode: <http://oaji.net/articles/2014/1186-1410934618.pdf> (date of access: 18.01.2021).
- [11] Karpitsky, N. (2003). *Virtuality and temporality // Bulletin of the Tomsk Polytechnic University*. - Tomsk. P. 132-136.
- [12] Castells, M. (2004). *Internet Galaxy: Reflections on the Internet, Business and Society*. Ekaterinburg: U-Factoria. - 328 p.
- [13] Barlow, J.P. *A Declaration of the Independence of Cyberspace*. [Electronic resource]. - Access mode: <https://www.eff.org/cyberspace-independence> (date of access: 20.01.2021).
- [14] Mankovskaya, I.B., Motlevsky, V.D. (1997). *Virtual reality // Culturology. XX century. Dictionary*. - SPb.: University book, 1997. - P. 73-76.