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# Virtual Reality and Consciousness: Specifics of Cultural-Philosophical Research

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#### Abstract

The article discusses the essence and significance of virtual reality, the genesis of formation and its impact on public life and its influence on the formation of consciousness. Virtual reality technology encompasses the software and hardware that make up the entire virtual reality world. Virtual reality was created with the aim of allowing people to know the world in a completely new and harmless way and to give new life to a number of industries through the proposed technologies. XXI century information age. Perhaps even thenat the moment, virtual reality covers the dominant time of human life. The information age has also led to the age of dependence, which unconsciously controls the human mind, opening the way to many opportunities and discoveries in human life. "Virtual reality" has actively penetrated the consciousness of modern society. The fact of the existence of virtual reality is associated both with the use of modern information technologies and with various mental, aesthetic, cultural, semiotic, esoteric processes. The concept of" virtual reality " is widely used to refer to various phenomena. To overcome the uncertainty and diversity of understanding this phenomenon, it is necessary to determine its essence. In short, there is nothing that cannot be done with technology in virtual reality systems. The study of the specifics of virtual reality is determined by the need to clarify the concepts of "virtual", "reality" and "virtual reality", which makes it possible to overcome the uncertainty that has arisen due to various interpretations of this phenomenon, to clearly understand the essence of this phenomenon. The need for research arises from the increased influence of virtual reality on consciousness.

*Keywords:* virtual, reality, national, consciousness. **Introduction** 

The study of virtual reality opens up new opportunities for understanding paradigms of thought, which allows us to derive philosophical and methodological meaning from different philosophical options for interpreting reality. Understanding the phenomenon of "virtual reality" as a cognitive tool is important for solving fundamental philosophical problems, which in turn opens up new possibilities for the development of special philosophical problems, such as some aspects of philosophical anthropology.

Asking the question of virtual reality is related to explaining the role of a person and his consciousness, because when considering physical reality in ontology and epistemology, there is an exaggeration of its objective nature and a departure from reality with human consciousness, that is, there is an underestimation of human subjectivity. These same methodological approaches are automatically transferred to the virtual reality research process. An in-depth study of virtual reality should take into account the emergence of new information technologies,

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as they allow to describe and study the issue of virtual reality and its impact on individual and collective actions, on the formation of certain personality traits.

The study of virtual reality, virtual events is very important for practical and theoretical human activity. Virtual events can significantly change the nature of the activity: increase or decrease its effectiveness, cause errors and serious negative consequences, etc. Thus, the need for cultural-philosophical research of virtual reality, the mechanism of its formation and life forms is determined by the insufficient and different understanding of virtual reality from the point of view of the unity of ontological, epistemological and anthropological approaches, as well as the need to understand the information processes involved in the formation of virtual reality and the consequences arising from this reality. Virtual reality is a living environment when a person interacts with a new reality.

The concept of "virtual reality" has now become a widespread term denoting a certain artificial world created with the help of computer technologies (Parshukova, 2022:7). Even now, the word "virtual" has a long and interesting history. The word "Virtus" comes from the Latin word, originally for the ancient Romans, it literally meant "courage" - that is, the characteristic of a real man and a brave warrior. On the one hand, any quality of a person was understood, on the other hand, as some manifestation of power and simply the ability to do something. In European philosophy of the Middle Ages, the "virtual" came to be called a special kind of real being: not just a being, but a kind of capacity for being - a being that is not strictly available, but already exists. The term "virtual" begins to be actively used in the cybernetic context in the last decades of the 20th century: the meaning of understanding cyberspace as a unified, "artificial reality" was used by the American researcher Myron Kruger in 1973: by this he meant the full and direct involvement of the human body in the telecommunication environment created with the help of computer technology (Batyrova, Poshivaylo, 2021:100). According to Reingold's definition, virtual reality is "a revolutionary technology for a computer-generated world-a room, a city, the entire solar system, or a part of the human body" (Sorokina, 2018:177). The term "virtual reality" was proposed in 1984 by the American scientist Jaron Lanier, the founder of VPL Research Corporation, a California-based research firm engaged in the development of virtual reality systems (Lanier, 2007:13). The term "virtual reality" today refers to a new direction in the development of information technology, which allows people to create the illusion of observing and even experiencing some artificial world created with the help of informatics and cybernetics.

In other words, virtual reality is a world artificially created by a person, he can enter and live in it for a while, when feeling a complex of sensations that he is familiar with or experienced for the first time in the real world.

The flow of information that a person receives through gadgets is incomparable to anything in the real world in terms of intensity, interest, variability. By actively interacting with gadgets, the human brain gets used to this mode, adrenaline and dopamine are constantly produced in the body, and the brain gets used to this dose as doping and needs new information from the virtual environment. In domestic and international disease registries, screen addiction belongs to adrenaline non-chemical addiction (Ali et al., 2024). Like any addiction, the obsession with being online is neurochemical. Virtual reality is an interactive world created using modern computer programs. There are many different characteristics that describe a virtual world, but they are very rare. Imitation of the real world makes one think one is still there. In order to make the virtual space, its properties and reactions natural, it is necessary to carefully analyze the

computer synthesis processes and compare them with real-time behavior. The use of virtual reality in scientific research and experiments opens many unique opportunities for scientists. This technology helps scientists better understand complex concepts, improve the efficiency of experiments, and provide an interactive experience in the study of phenomena. By exploring a virtual environment, researchers can touch, move, and manipulate objects and data in a way that is not possible in the physical world.

# **Research Materials and Methods**

From a methodological point of view, the research was carried out within the recognition of the existence of a system of human reality, not only objective and subjective. The structure and logic of the research is determined by the methodological thesis about the integrity of socio-cultural reality in historical and structural aspects. A number of formal and meaningful methods are used in the work, for example, the historical-philosophical method, the method of moving from the abstract to the concrete, the comparative method. In addition, we rely on the principles of determinism, historical and logical unity, consistency, and objectivity.

"Man-machine" interactive dialogue leads to the possibility of creating a virtual reality, the content of which is to show a person that he can update new personal qualities, mental states (N.V. Dobrenko, I.Yu. Kotsyuba, 2016:9). Knowing the features of virtual reality and its working mechanisms creates the need to study this phenomenon, to reveal the changed nature of the existence of virtual reality as an extreme manifestation of the interaction of technical and socio-psychological realities. In this regard, attention was paid to clarifying the concept of transformed form, its ontological, epistemological and methodological status.

### **Research Results and Discussion**

Thanks to the scientific and technological achievements of the second half of the  $20^{th}$  century and the beginning of the  $21^{st}$  century, a new image of reality, which is closely related to changes in the entire cultural system, is formed, and the field of phenomena denoted by the word "virtual" is opened. The rapid development of information and communication technologies started the expansion of the concept of "virtual reality", its popularity and widespread use, especially in scientific discourse, as well as its semantic polyphony. The reality expressed by this concept has become an important factor in the development of culture, a part of human life, a special environment in which all spheres of human life are directly or indirectly connected.

Virtual reality mediates communication and socialization by influencing the horizons of everyday human experience and real-world behavior. Virtual reality technologies immerse the user's mind in an artificial world, which he begins to perceive as real. The concept of "virtual reality" is defined as a person's impression of being in an artificially created world (Ivanov, 2002:28). Virtual reality results from the subject's interaction with an artificially created external environment. The emergence of virtual reality is the process of replacing reality with a simulation modeled by modern technical means.

Virtual reality has anthropo-ontological foundations, because a person is the main participant of virtual events. The ontology of virtual reality is mainly anthropocentric, focused on the person who plays a decisive role in his life. Virtual reality represents the unity of objective, subjective and transcendental components, in which their content subjects are synthesized. Each of these components requires appropriate methods of investigation and description. Objective components are described with the help of unambiguous, systematized and formalized scientific

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knowledge. This form of knowledge extends to subjective reality in its objectivable part. However, a significant part of virtual reality is not objective, which explains the existence of many interpretations of it in the scientific discourse, as well as the presence of elements of uncertainty in its description. The most representative form of knowledge of this side of virtual reality is art, which makes the universal principles of man proportional and comprehensible, transforming them into concrete forms.

The main difference between human nature and nature is the need to find its meaning in the process of life. This situation brings to the fore the problem of a person's responsibility for himself and the virtual world he has created, finding and preserving the essence of a person in the context of large-scale virtualization of reality, his spiritual orientations in the virtual world, and the development of virtual understanding abilities of a person. Thus, the complex and comprehensive nature of the relationship between a person and an artificially created virtual environment provides its special everyday function: many active users spend all their free time in the virtual world and become its "residents". A person's perception of the border between real and artificial reality is so great that often a person ceases to understand where he is. Acts as a replacement of one type of virtual existence for another. From the point of view of the typology of existence, virtual existence means a mixture of types: one type of existence is assumed into another type. So, although a person initially understands the artificial nature of the virtual world, but at the same time often identifies it with reality, such a replacement is usually accompanied by changes in the person's worldview. Therefore, virtual reality and consciousness are closely related, consciousness, forming virtual reality, in turn, virtual reality has become a process that can influence consciousness in a wide way.

Virtual reality has both positive and negative effects on people. The positive side of virtuality includes its ability to strengthen the physical and mental capabilities of a person with the help of electronic devices, to expand the boundaries of human life, to give a person new opportunities to recognize objective reality and his inner world. The negative side of virtuality refers to its destructive effect and the possibility of deforming the spiritual world of a person, closing his existence within the limits of available life, destroying humanity and losing his spiritual ideals.

Problems related to the philosophical understanding of consciousness are very important for the system of cultural and philosophical sciences, and also contribute to solving the problems of effective creation of real reality. Today, when the world is increasingly exposed to a global crisis, the tendency of individuals and communities to lose their social and cultural identity is revealed more and more persistently. Problems related to the philosophical understanding of consciousness are very important for the system of cultural and philosophical sciences, and also contribute to solving the problems of effective creation of real reality. Today, when the world is increasingly exposed to a global crisis, the tendency of individuals and communities to lose their social and cultural identity is revealed more and more persistently.

Virtual reality and virtual consciousness are different: the first is subjective reality, the inner life world of "I", the second is a reflection of virtual reality, on the one hand, and on the other hand, the result of the properties of everyday consciousness. That is, virtual consciousness is a part of consciousness that is a reflection of virtual reality, a form of adaptation to it. The nature and meaning of virtual consciousness was revealed by distinguishing its two levels: simple and theoretical. Special attention should be paid to virtual consciousness.

Consciousness is understood as a system of representations in which individual scientific and

ideological concepts, ideas, concepts are combined. It tends to ideologize and move to a theoretical scientific mind. Its forms are different: common sense, scientific knowledge, non-scientific knowledge. As a rule, consciousness is based on empirical experience and common sense, and its development is measured in relation to the practical actions of a person, their results and consequences.

Changes in human consciousness in the modern world are influenced by three interrelated factors: living conditions, social culture, communicative relations and symbolic systems. An important mechanism for the interaction of virtual consciousness with virtual reality is communicative tools: a change in the type of communication leads to a change not only in the character of everyday consciousness, but also in its nature. Virtualization of consciousness is simple and theoretical. Although virtualization is a natural feature of thinking in the cognitive process, the extent to which it is virtualized requires investigation. There are historical forms of consciousness virtualization: myths, mysticism, religion, information-computer virtualism.

In certain objective and subjective conditions, information-computer realities are virtualized not only technologically, but also existentially, psychologically, and transcendentally. Virtualization of consciousness depends on needs, interests, values. Thus, the process of virtualization of reality is the creation of subjective reality in order to satisfy the unsatisfied needs of real reality through images, symbols, simulations. Virtualization of consciousness depends not only on a certain virtual reality, but also on the degree of freedom of a person, which is also the result of alienation of consciousness and overcoming it. In the first case, the grounds are objective, in the second both objective and subjective. A person's consciousness, including virtual consciousness, information, reliability, importance, distribution of space and time, "I" experience, is formed by the connection of his life world with the "other" life world. Virtual consciousness is religion, art, literature, etc. means not only the dialogue with "I" and "others", but also the immersion in virtual reality with existential time.

The process of virtualization of reality and virtualization of consciousness cannot be recognized as either negative or positive. The consequences of virtualization of consciousness can be adequately assessed only by taking into account the degree of virtualization of consciousness at the individual and social level, as well as its direction. Of particular interest is the impact of virtual reality on the individual's self-awareness. Self-awareness refers to the way of giving the world formed in the process of forming one's "I" - mobile personal knowledge. It is influenced by the natural and social environment. Virtual reality, in particular, the space created by the Internet, is a very important influencing factor. It is safe to say that the Internet will significantly change the way the world is presented. The Internet creates a special space commonly called "cyberspace" and a special type of reality - "virtual reality", which, being a type of symbolic reality, does not exist as part of the natural or social world. But it has the quality of being only for the mind of the individual. In addition, there is a real feedback: the effect of virtual communication on the human mind. Due to its specificity, virtual communication creates special opportunities for a person, its conditional implementation significantly changes a person's mind. Virtual reality creates conditions for re-evaluation of values. A person can live several lives in different temporal directions.

In recent decades, the issue of virtual reality has been the focus of cultural and philosophical research, but it should be noted that modern authors approach this issue from radically opposite positions. Often, virtual reality is considered as a product of the work of the Internet and as a

supporter of communication, as a sphere of dissemination of mass culture, whose norms and value orientations are fundamentally different from reality. The view of virtual space as an artificial environment created by computer technologies is widespread. In particular, A.Ya. Lensu, analyzing the history of the emergence of ideas about virtual reality, "virtual environment, virtual reality - these are products of modern scientific and technical progress, the result of computerization of our life today" (Lensu, 2009:37).

But, on the other hand, views appear that virtual identity is a product not only of computer technology, but also of television, cinema, and art. The discourse of virtual reality in modern philosophy confirms the importance of this problem on the one hand and the existence of different conceptual ways of solving it on the other hand. It is quite possible that there are different ways to solve this problem, including the fact that there are different types of virtual reality. However, the presence of virtuality, which began with the advent of the Internet and the rapid development of computer technologies, and all processes related to data - the phenomena of social reality - cannot be ignored.

In the 19<sup>th</sup> century, A. Schopenhauer called consciousness "the trap of the universe", a nod to the terrible mystery of consciousness, which remains a dark place in human knowledge. The more complex the socio-cultural space in which a person lives, the more complex answers are offered (Schopenhauer, 1993:124). This, in our opinion, has to do with the modeling of connections and relationships of the surrounding reality that our mind perceives. R. Rorty stated that the philosophy of consciousness is the only useful philosophical discipline in which it is difficult to disagree about the validity of the problem of consciousness in order to solve many other problems. A person thinks and this is the only thing that cannot be doubted, says R. Descartes (Ladov, 2004:18). On the other hand, "there is no real thing that consciousness attends to and processes. Reality is always given by the consciousness that perceives it, and the act of understanding is also an act of transformation. We have no preconceived notions about what reality is, because when we always think about it, we know how we perceive it. however we think, reality is constantly changing with our cognitive faculties" (Descartes, 1950:320). The secret of our mind lies in its ability to increase or decrease reality, to change it. In the "Encyclopedia of Philosophical Sciences" Hegel noted: "...in the mind we see a great difference between the "I" - which is very simple on the one hand, and infinitely many on the other different worlds" (Hegel, 1974:136).

We have to admit that from the huge amount of information, our mind chooses what "surprises" it, what does not cause rejection, and sometimes gives it what it wants. The images of the world created in our minds are to a certain extent virtual and differ only in their vision. Thus, it can be said that the virtual world is the world of our ideas, and the question of the relationship between consciousness and virtuality clearly affects the long-standing "philosophical question of moving from possibility to act" (Lednikov, 2010:240).

The meaning of the concept of "virtual world of consciousness" can be explained as follows: it is the perceived reality reformatted according to the existing patterns and algorithms in our mind (Sevalnikov, 2004:210). The reality created by our imagination, it sometimes replaces reality, forces a person to take actions and decisions that do not correspond to the real situation. But the point is that we don't know what the actual state of things is because our minds have reshaped the information we receive. Due to this work of consciousness, a person sometimes has difficulties in communicating with others, each of them has its own virtuality, reformatting of

reality. Thus, we believe that the workings of consciousness are actually only relatively related to reality, and a product of virtuality, which is a greater reality than what is available to each. This is due to the human tendency to double the reality, which arose much earlier than the tendency to reflect and understand. It is difficult to argue with this: all types of artistic creativity, even philosophical texts, are types of man-made virtual worlds (Zakharenko, 2000:25).

When the phrase "virtual reality" is used in various individual publications, it becomes clear that different conceptual layers are mixed in a strange way. Also, it is clear that this concept is not simple, it cannot be reduced to simple concepts. In our opinion, this is a complex philosophical concept with many semantic levels of understanding.

In order to understand the connection of our consciousness with virtuality, the lack of this connection, we will make a brief historical and philosophical analysis, we will try to shed light on the meaning of this concept. The virtual reality discourse existing in modern philosophy shows the complexity of this problem and the lack of a single way to solve it. Of course, philosophy is at the stage of understanding this phenomenon rather than at the stage of established solutions. In addition, the attempt to formulate a single definition leads to a multitude of different definitions, the foundations of which are sought in science, religion, art or psychology.

Immersing a person in a self-created virtuality involves cutting out the unnecessary, the irrelevant, both by choice and as a result of certain communication limitations that exist in society. In this case, virtuality appears as reality augmented and modified by one's own imagination. In this case, the status of virtual reality is much higher than the status of real reality, it is "closer" and understandable to the individual. D. Deutsch: "fantasy is a direct form of virtual reality" (Deutsch, 2018:59). However, it is not against the fact that our minds form subjective models of reality. Since virtual space is a space consisting of ideal objects, by interacting with it, we interact not with real objects, but with their images or perceptions of these objects. It is in this context that virtual reality can be classified as subjective reality or the reality created by our minds. So, we have listed a number of realities that to some extent do not resemble computer virtuality. In this regard, V.O. Sayapin distinguishes between natural and artificial virtual reality and makes a very important note: "the sought-after unity of natural and artificial reality depends on the creative ability of a person, in his mind, he can not only depict the world, but also create it according to the laws of meaning" (Sayapin, 2006 :905).

We believe that natural virtuality is created without technical means, artificial, respectively, with the help of various technical means. The first exists only as a result of the activity of an individual, and the second, in turn, being the result of the creative activity of people, is an artifact of social culture, the result of the projective relationship of consciousness to the world of things.

# Conclusion

The terms derived from the word "virtual" are actively introduced by analysts of modern society - from philosophers and cultural scientists to politicians and journalists. In our opinion, the spread of new terminology, on the one hand, shows the desire to show the growth of the role of computer technologies in people's everyday life, and on the other hand, it shows the tendency to expand the concept of "virtual reality" and use it metaphorically. In addition, interest in the issue of virtual reality has been associated with the revival of ideas about the multiplicity and construction of realities in which a person lives in modern culture and philosophy, and an

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emphasis on the study of reality. On the other hand, although virtual reality is a very popular topic of philosophical, cultural and other scientific studies, it also requires ontological analysis and typology. Thus, the cultural-philosophical study of the peculiarities of virtual reality, on the one hand, is connected with the need to define the border between virtual reality and ontologically similar phenomena, and on the other hand, to clarify the important characteristics of virtual reality, the features of its ontology, genesis, interaction with people.

In the study, attention was paid to the study of the historical and philosophical aspect of the introduction of the concepts of "virtual reality" into modern culture, to determine the ontological foundations of virtual reality, to consider the phenomena in which the concept of "virtual reality" is widely used today, to determine the legality of such use, and to determine its ontological features and typology.

The ontological analysis of virtual reality leads to the idea of performance to consider virtual reality in terms of the problem of alienation, as it is characterized by the transformation of human action and its result into an independent force that dominates and opposes it.

The idea of virtuality affects deep layers of human life. Philosophical understanding of the nature of virtual reality is important not only from the perspective of the present, but also from the perspective of the future of humanity.

The existence of modern man, man of man-made culture, is concentrated only in a series of events characteristic of an artificially created virtual reality. The natural-cultural virtual event has a very deep symbolism. During the cultural and historical development of a person, new ones appear and old virtual realities become the past, which means a meaningful change in the scope of human existence in a reflexive way.

Another reason for exaggerating the importance of virtual reality as a theory of cognition and an activity theory of creating world models is a weak familiarity with research on the nature of human thinking activity and all forms of social consciousness. A person is a being capable of creating thoughts, creating an author's reality and "living" in them, thinking, proving. The power of the human mind - figurative thinking, literature and art, science in general means increasing the spiritual knowledge of a person, the level of his cognitive culture. Category of knowledge-being and consciousness. The power of the mind, the social consciousness of a person realizes itself in practical reality and theoretical activity. They are formed and developed in the stereotypes of mass public consciousness and its psychology. Our lives are often determined by the activities of our minds. Man creates, the world creates. In this case, the mind separates the created world from reality. The process of creating reality is endless. In our opinion, any known reality can be called virtual, and in certain cases, a similar virtual reality creates another. Consciousness is the basis of this process. Processes and phenomena of reality are impossible without projection into the virtual world.

A person in virtual reality can reveal the inner world of the century, especially its hidden desires, thoughts, and difficulties. A person who "enters" a virtual reality is liberated, as if he has removed the need to obey certain laws and norms. All this significantly changes a person's attitude towards himself, because a person receives new communication experiences. Virtual reality can have a negative impact on a person's mind, deforming it in the direction that a person does not respond adequately to actual reality. In modern life, each person has only one choice of action. The potential of virtual reality is particularly evident when it comes to the minds of

children. The laws of virtual life are transferred to real life, a chaotic mixing of ideas takes place. These are all examples of indirect effects on the human mind. Currently, a specific trend has emerged - mythodesign - a special type of activity in which virtual reality technologies are used to create and control human behavior. All mythodesigns are aimed at changing the inner world of a person, changing his personal memory for social goals. Thus, it can be said that virtual reality, being a product of human consciousness, has a significant impact on the process of its formation, emphasizes its components in new ways, and sometimes simply goes out of control and creates practical "shocks" that lead to deformations and modifications of modern human consciousness.

### References

- Ali, M., Khan, T. I., Khattak, M. N., & ŞENER, İ. (2024). Synergizing AI and business: Maximizing innovation, creativity, decision precision, and operational efficiency in high-tech enterprises. Journal of Open Innovation: Technology, Market, and Complexity, 10(3), 100352.
- Batyrova K.S., Poshivajlo Ja.G. Istorija dopolnennoj real'nosti i perspektivy ee primenenija v kartografii. [The history of augmented reality and the prospects of its application in cartography]. Kartografija i geoinformatika. Vestnik SGUGiT, Tom 26, № 5, 2021
- Sorokina D. K. primenenie tehnologij virtual'noj i dopolnennoj real'nosti v komplekse integrirovannyh marketingovyh kommunikacij na osnove analiza marketingovyh situacij [The use of virtual and augmented reality technologies in a complex of integrated marketing communications based on the analysis of marketing situations] / D. K. Sorokina. Tekst: neposredstvennyj / / Molodoj uchenyj. 2018.- № 24 (210). S. 176-179.
- Kirik T.A. Virtual'naja real'nost' i ee ontologicheskie prototipy [Virtual reality and its ontological prototypes]: Monografija.- Kurgan: Izd-vo Kurganskogo gos. un-ta, 2007.- 134 s.
- Ivanov D.V. Virtualizacija obshhestva [Virtualization of society] / D.V. Ivanov. SanktPeterburg : Peterburgskoe vostokovedenie, 2002. 214 s.
- Dobrenko N.V., Kocjuba I.Ju. Prikladnye voprosy psihologii [Applied issues of psychology] / Uchebnoe posobie. Universitet ITMO, 2016. 90 s.
- Lensu, Ja.Ju. Istorija virtual'noj sredy [The history of the virtual environment] : ucheb.-metod. kompleks / Ja.Ju.Lensu. Minsk: Izd-vo MIU, 2009. 178 s.
- Shopengaujer A. Mir kak volja i predstavlenie. T.I // Shopengaujer A. O chetverojakom korne... Mir kak volja i predstavlenie [The world as will and representation. T.I // Schopenhauer A. About the fourfold root... The world as will and representation]. T. 1. Kritika kantovskoj filosofii. M.: Nauka. 1993. S. 239
- Ladov V.A. BP-Filosofija (filosofskie problemy virtual'noj real'nosti) [BP-Philosophy (philosophical problems of virtual reality)] : Uchebno-metodicheskoe posobie. Tomsk: Izd-vo Tom. un-ta, 2004. 42 s.
- Dekart R. Metafizicheskie razmyshlenija [Metaphysical reflections] // Dekart Rene. Izbrannye proizvedenija. M.: Gospolitizdat, 1950.- S. 319-407.
- Gegel' G.V.F. Jenciklopedija filosofskih nauk [Encyclopedia of philosophical sciences]. T. 1. Nauka logiki. M., «Mysl'», 1974.-452 s.
- E.E.Lednikov. Virtual'naja real'nost' i filosofija [Virtual Reality and philosophy]. Jepsitemologija i filosofija nauki. Jepistemologija i filosofija nauki. 2010. tom 25. №3 s. 339-341.
- Seval'nikov A.Ju. Ontologicheskie aspekty virtual'noj real'nosti [Ontological aspects of virtual reality] / A.Ju. Seval'nikov // Virtualistika: jekzistencial'nye i jepistemologicheskie aspekty. Moskva : Progress-Tradicija, 2004 S. 208–242.
- Zaharenko I.V. Mifotvorchestvo i virtual'naja real'nost' [Myth-making and virtual reality] / I.V. Zaharenko // Jazyk, soznanie, kommunikacija. Moskva, 2000. Vyp. 13. S. 23-27.

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- Dojch D. Struktura real'nosti: Nauka parallel'nyh vselennyh [The Structure of reality: The science of parallel universes] / Djevid Dojch ; Per. s angl. 3-e izd. -M.: Al'pina non-fikshn, 2018. 614 s.
- Sajapin V.O. Komp'juternaja real'nost' kak novejshaja forma virtual'nosti [Computer reality as the newest form of virtuality]. Vestnik TGTU. 2006. Tom 12. № 3B. s. -904-908