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THEORETICAL AND METHODOLOGICAL APPROACHES TO THE STUDY OF VIRTUALIZATION IN A DIGITALIZED SOCIETY

Abstract. *This article examines the process of virtualization that arises from the activity of individuals in cyberspace within the context of a digitalized society, treating it as a socio-philosophical phenomenon. The study demonstrates that virtualization, as a new and non-real form of socialization, has become a pressing research issue at the intersection of philosophy, psychology, sociology, and religious studies. Drawing on theoretical frameworks developed by key Western and Russian scholars including Sorokin, Durkheim, Baudrillard, Krueger, Sutherland, Lanier, Ivanov, Maslow, and others the article traces the evolution of the concepts of “virtual reality” and “virtualization,” and analyzes the principal methodological approaches applicable to the study of virtualization in the information society. The article concludes that virtualization constitutes a transformation of real social relations into a technological field and proposes a set of complementary methodological tools for its further investigation.*

Keywords: *virtualization; virtual reality; cyberspace; digitalized society; socialization; information society; social identity; virtual space; cyberspace; identification process.*

INTRODUCTION

The study of the virtualization process arising from individuals' activity in cyberspace within the context of a digitalized society considered as a socio-philosophical phenomenon requires the application of a number of scientific methods drawn from philosophy, psychology, sociology, and religious studies. Virtualization has become a pressing research concern because it manifests itself as a new, non-real form of socialization. In a digitalized society, virtual space acts not only as a factor that enhances people's capacity to appropriate the possibilities of modern technologies, but also as an agent

influencing the transformation of their traditional spiritual and cultural values, religious views, worldviews, and systems of conduct (Alieva & Lantratov, 2008:55).

From this perspective, virtualization is recognized simultaneously as a vivid phenomenon of innovative development and as an alternative form of the environment in which individuals undergo socialization. For this reason, the concepts of “virtualization” and “virtual reality” must be analyzed in comparison with the terms “socialization” and “social space,” since real social existence understood as society and its components: consciousness, knowledge, ideas, motives, values, human conduct, and individual activity is interpreted as a kind of axiom and is fundamentally distinguished from the non-real virtual space.

This article aims to systematically examine the theoretical foundations and methodological approaches that have been developed for the study of virtualization as a socio-philosophical phenomenon, to analyze the key concepts of the field, and to propose a set of methodological tools for further empirical and theoretical investigation of the phenomenon within the context of digitalized society.

METHODS

This study employs a theoretical-analytical approach, drawing on conceptual and terminological analysis, comparative analysis of theoretical frameworks, and a systematic review of the scholarly literature on virtualization and virtual reality from Western, Russian, and Central Asian academic traditions. The principal method is conceptual analysis: the key terms “virtualization,” “virtual reality,” “cyberspace,” and “socialization” are examined both etymologically and in terms of their theoretical evolution across different scholarly traditions. This is supplemented by comparative analysis of the approaches of foundational sociologists (Sorokin, Durkheim) and contemporary theorists of virtual society (Baudrillard, Bühl, Ivanov, Wiener, Shcherbina). The study also reviews the methodological toolkit applicable to the empirical investigation of virtualization, including terminological analysis, classification, survey and observation methods, statistical analysis, comparative analysis, SWOT analysis, and expert evaluation methods.

RESULTS

The social foundations of virtualization: Sorokin and Durkheim. According to the researcher P. Sorokin, the aggregate of human consciousness and moral norms constitutes

the most important criteria that set society in motion, ensure its existence, and drive its development. These are precisely what occupy a central position among the principal indicators of the state, functions, and development tendencies of social processes (Alieva & Lantratov, 2008:55–61). The French scholar É. Durkheim, when discussing the aspects that develop social relations and social existence, focuses on the mutual connections between social structures and institutions. Accordingly, changes in human thinking and actions during the course of one's life occur under the conditions of the individual's striving to survive and of the assimilation of the traditions of the social group (Kharcheva, 2000:22).

Socialization and its relationship to virtual space. On the basis of the above-cited definitions, the concept of socialization may be defined as follows: "Socialization is the process, spanning from birth to the end of one's life, of assimilating the existing and emerging patterns of conduct, norms, values, culture, religion, upbringing, knowledge, skills, and customs that are necessary for a person's integration into society" (Qayumov, n.d.) a definition that constitutes the sociological interpretation of this concept. However, the process of socialization in virtual space differs somewhat from its real-world counterpart. In virtual space, the transformation of human consciousness and the values associated with it represents one of the pressing concerns of the information society; encompassing social space, it has found expression in contemporary scholarly discourse in the term "multi-reality." This view is studied within the "polyontism" direction of the virtualistics school, indicating that reality simultaneously exists in several forms (Pronin, 2008:5–43).

On the basis of the definitions emphasized above, it may be said that the process of socialization is a reality associated with a person's consciousness, worldview, and way of life; it arises in the conditions of establishing communication between two or more people constantly carried out among the members of society in the reality where the person resides, and finds its expression in the person's sense of belonging and in their decisions. From the above considerations it is possible to draw the following conclusion: socialization whether in a real or a non-real space is a reality that arises as a result of relations formed between people in a given space, of social attitudes assimilated by people, of identification processes, and of the acceptance of the cultures and norms of conduct characteristic of that social space.

Evolution of the concept of virtual reality. It is precisely the condition of socialization in virtual space that proceeds organically and in parallel with the process of virtualization. For this reason, virtualization refers precisely to the reality that arises as a result of people's activity in virtual space. At the present time, various views exist in scholarly and academic circles regarding the introduction into scientific discourse of the concepts of "virtual reality" and "virtualization."

Initially, many scholars evaluated virtualization as a product of technological progress. Proponents of this technological approach viewed virtualization and the virtual environment as a reality presupposing the cooperation of humans and technology, emerging under the influence of innovative technologies and communication tools. The American researcher M. Krueger, who conducted the earliest investigations in the field of virtualization, introduced the term "artificial reality" into scientific practice for the first time in 1960. This concept of "artificial reality" is today interpreted by researchers as "virtual reality," "virtual space," "virtual society," and "cyber-society" (Shakhmartova & Boltaga, 2011:102–103).

Around 1965, thanks to the use of the first computer displays created by the computer graphics researcher A. Sutherland, the concept of "virtual world" began to be applied to a reality or space in which people, without being separated from the real environment, could imagine themselves as living in another space and enter into communication with their worldviews and emotional experiences (Petrov, 2013:23). Sutherland thus occupied a place among the first researchers to introduce this term into scholarly discourse. The researcher J. Lanier, in 1985, employed the concept of "virtual reality" in relation to the non-real space arising as a result of interpersonal relations with the assistance of computers and specialized technical programs.

Russian perspectives on virtualization. In contrast to Western researchers, the Russian scholar D. Ivanov argued that virtualization is a continuation of reality (Ivanov, 2000), while I. Shapiro maintained that it is a product of information technologies (Shapiro, 2008:141–143). The analysis of the data reviewed shows that socialization in virtual space is called "virtualization" and refers to the exchange of ideas arising as a result of human communication through technical means.

The above views are also vividly illustrated by the statement of Norbert Wiener, one of the founders of cybernetics: "Virtualization is a concept that emerged as a result of the transformation of cultural and educational changes in the 1960s–70s of the twentieth

century, which entered into widespread use through science fiction works, and is a reflection of the alternative to the real social environment” (Wiener, 1988:16). The scholar V. Shcherbina, who advanced the idea that “virtualization” manifesting itself as a reflection of the information society may lead to inter-societal exchange, emphasizes that virtualization “generates changes in social relations among people in society with the help of computer technologies, and consequently finds its reflection in the creation of a new society” (Shcherbina, 2001:79–80).

Baudrillard and the semiotic dimension. The works of J. Baudrillard also contain theses concerning virtualization and virtual space as phenomena associated with human psychology. In his view, virtualization in real objects gives rise to what he defines as a “hyper-space” or “phantom environment” arising due to “semiotic influence.” According to his approach, “semiotic influence” manifests itself as a particular substitute performing the function of society, and is reflected in social relations as a complex of symbolic signs and representations. Consequently, relations among people are realized primarily through conventional signs and representations. This phenomenon maintains its existence as a separate reality from the real environment (Baudrillard, 2010:113–117).

Bühl and the “virtual society” theory. In particular, according to A. Bühl, the author of the “virtual society” theory, computers have evolved from electronic devices into universal machines producing “mirror worlds.” As a result, parallel worlds have come into existence in which the virtual analogues of the real mechanisms of society formation have begun to function. For this reason, Bühl designates the transformational process of economic and political information on the Internet, as well as the establishment of communication through computer users and cyber technologies into virtual space, as the “virtualization” of that space.

The analysis of scholarly theories shows that because the process of “virtualization” does not possess a specific time and space of its own, the goals, values, and social motives of the participants of virtual reality also change according to the rules characteristic of virtual society, finding their reflection in an identificational process through a transformational process.

Elements of virtual space and avatar identity. Among the characteristics belonging to virtualization, hypertext, images, music, and other information structures may be included as elements that integrate the subjects of the virtual world (Mishcheryakov, 2012:9–11). Furthermore, avatars serving as users and their “nicknames” (images placed on users’

pages in mobile social networks) are expressed as elements that manifest the image of the virtual person. In contrast to social space, the biological condition, race, sex, age, and social origin of the members of the virtual community lose their significance, and the task of portraying the virtual subject is carried out and realized precisely through their messages that is, through messages in the form of letters (Khuda-Granat, 2010:167–184).

Maslow's hierarchy and virtualization of needs. The above information demonstrates that while virtualization is creating wide positive opportunities in the economic sphere, it is causing a number of negative situations in the processes of social consciousness in particular, in the process of the industrialization of consciousness. For example, according to Abraham Maslow's hierarchy of needs, the fact that a person is realizing through the global network the needs that arise during the period of socialization makes it possible to interpret the phenomenon of virtualization as its new manifestation. For instance, the ability to order food and beverages through social networks or mobile messengers to satisfy physiological needs; the possibility of satisfying needs related to religious practice; the establishment of communication with existing virtual groups and virtual organizations in the network to satisfy social needs; and the possibility of managing people in virtual space, manifesting oneself, setting goals, and making decisions to satisfy spiritual needs all of these illustrate the extension of the virtualization process (Pleshakov, 2012:45).

Types of virtual reality interaction. On the question of the virtualization of the individual in the identificational process of a digitalized society, the interaction between the individual and virtual space is divided mainly into three types: passive, active, and exploratory virtual reality (Silaeva, 2004:19). In passive virtual reality, the person only performs the function of a spectator that is, enters into contact as a consumer of information, but cannot exert influence on the virtual space. Active virtual space grants users all corrective and discursive possibilities. Exploratory virtual space is a type that interests cyberspace researchers but has not yet been fully revealed; according to the prognostic analytical conclusions of analysts, it is one of the important factors determining the digital future of humanity.

METHODOLOGICAL APPROACHES TO THE STUDY OF VIRTUALIZATION

Drawing on the concepts, approaches, and theories presented above, the virtualization of people's way of life is a process of displacement of the field of mutual economic,

political, and social relations among people from the real environment into the field of technologies the product of information technologies. This, in turn, requires a practical methodological complex based on theories.

The main methodological approaches applicable to the study of virtualization and the information process in social networks are as follows. The terminological analysis method may be used for analyzing the definitions given to internet-technology-related concepts such as “social network,” “cyberspace,” “internet,” and “messenger” to reveal their essence and to develop conceptual definitions. The classification method assists in effectively identifying existing internet technologies employed in the process of propaganda through information, organizing them into a single system, and categorizing them. Survey, observation, and statistical analysis methods are used to determine the development tendencies of internet technologies employed in promoting religion in the information society, the formation of social identity, identity transformation, and their positive and negative consequences. The comparative analysis method is used to study foreign experience in countering negative propaganda in social networks, and to identify effective methods for developing a concept for its elimination through comparative results. SWOT analysis and expert evaluation methods may be applied to assess the existing national mechanism for preventing negative propaganda in the internet network and for eliminating its consequences.

DISCUSSION

The analysis presented in this article reveals a fundamental tension at the heart of the virtualization phenomenon: on the one hand, virtual space offers individuals new opportunities for socialization, economic activity, religious practice, and self-expression; on the other hand, it generates a range of threats to traditional values, cultural identity, and religious worldview. This tension is reflected in the diversity of theoretical frameworks applied to the phenomenon from Baudrillard’s (2010:113) semiotic analysis of virtual space as a “hyper-reality” that substitutes for genuine social relations, to Maslow’s (cited in Pleshakov, 2012:45) framework, which allows for a more benign reading of virtualization as an extension of the human capacity to satisfy fundamental needs.

The distinction between passive, active, and exploratory virtual reality (Silaeva, 2004:19) is particularly significant for the study of religious identity formation in cyberspace, which lies within the specific research interest of the present author. In

passive virtual reality, the individual functions as a consumer of religious content without active participation; in active virtual reality, the individual both consumes and produces religious content, thereby actively contributing to the formation and transformation of online religious communities; in exploratory virtual reality, entirely new forms of religious experience and community may emerge that have no direct analogue in the physical world.

The observation by Khuda-Granat (2010:167–168) that in virtual communities the biological markers of identity race, sex, age, social origin lose their significance while textual self-presentation through messages becomes paramount has profound implications for the study of religious identity online. It suggests that virtual religious communities may be characterized by a fundamentally different mode of identity construction than their offline counterparts, one in which self-presentation through text is both more malleable and more consequential. The methodological toolkit proposed in this article combining terminological analysis, classification, survey and observation methods, comparative analysis, and expert evaluation offers a comprehensive framework for the empirical investigation of these dynamics in the Uzbek and broader Central Asian context.

CONCLUSION

In conclusion, although virtualization has a non-material form, it is accepted by people in place of real social relations. The electronic means of communication considered the primary factor driving the virtualization process are exerting a noticeable influence on the erosion of users' traditional values, bringing to the fore issues awaiting resolution. At the same time, with the help of information society theory and systematic analysis methods presented in this article, it is possible to determine the promotion of cultural, political, and religious views and to identify the formation of social identity under their influence, thereby enabling a comprehensive investigation of the subject.

Furthermore, by applying the scholarly approaches within the scope of the subject, it becomes possible to develop concrete proposals for identifying and resolving problems related to the religious factor in contemporary cyberspace. The theoretical foundations reviewed in this article drawing on Sorokin, Durkheim, Baudrillard (2010), Wiener (1988), Shcherbina (2001), Ivanov (2000), Shapiro (2008), and the virtualistics school (Pronin, 2008) together with the proposed methodological toolkit, provide a coherent framework for the empirical and theoretical investigation of virtualization as a socio-philosophical phenomenon of the digital age.

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