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SOCIAL RISKS AND CULTURAL TRANSFORMATIONS IN THE ERA OF FOURTH INDUSTRIAL REVOLUTION

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Abstract

In the era of the fourth industrial revolution, the globalization processes pose many social risks due to the widespread use of new networked social technologies, the development of self-learning programs based on artificial intelligence, and the virtualization of the human living space. Cultural transformations caused by postmodernism based on the deconstruction of a person's personality are closely intertwined with the capabilities of the achievements of big data and artificial intelligence. The widespread use of crowdsourcing technologies leads to a decrease in the importance of professional ethics and the moral responsibility of a scientist or engineer for the consequences of using their developments. The risks of merging big data technologies with the activities of the criminal world are increasing. Within the framework of cultural transformations, the destruction of all kinds of identities is observed, not only national-cultural but also gender and human. The worldview database of processes is the concept of "nothing-logia." As an experimental environment, virtual reality is used. The spread effects of the techniques transition to altered states of consciousness using virtual reality are analyzed, as well as the results of out-of-body experiments on the alienation of the body. Among the measures that can reduce the manifestation of these risks are considered strategies for the creation of state targeted programs, state expertise of virtual assistants, and network resources in order to identify and prevent destructive elements in their activities.

Keywords: Social risks, identity, cultural transformations, the fourth industrial revolution.

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1. Introduction

The transformations of modern society and its culture are mainly due to the latest advances in science and technology, which modern scholars combine with the concept of the "fourth industrial revolution" (Groscurth, 2018; Lewis, 2017; Yáñez, 2017). According to the president of the World Economic Forum in Davos, Schwab (2017), modern society has moved to a new stage of development, which will lead to radical changes in social relations, lifestyle, and cultural values. New network social technologies have a significant impact on the processes of management, communication, and professional activity. Such new social technologies are crowdsourcing, blockchain, big data, "collective intelligence" technologies based on artificial intelligence, the Internet of things, robotics, achievements of biotechnologies and nanotechnologies, quantum computing, and other technologies. New network social technologies give rise to unprecedented opportunities for the development of personality, its creative initiative. At the same time, they also give rise to specific social and cultural risks, the study of which is the most relevant in the modern dynamically changing world.

2. Problem Statement

The contradictory nature of the entry of modern society into the era of the fourth industrial revolution raises the problem of social risks posed by the achievements of science and technology in a new round of development of scientific and technological progress. Amid new opportunities provided by the Fourth Industrial Revolution, dangers and negative consequences for a person's personality are relegated to the background. The identification and study of potential destructive factors associated with the deepening of globalization processes based on the development of artificial intelligence, new network social technologies, and the expansion of virtual reality technologies seem to be the most significant today.

3. Research Questions

The development of globalization began in the second half of the twentieth century. In the twenty-first century, globalization processes led to a crisis in the primary spheres of society. The growing instability in the economic, political, and cultural spheres of public life has given rise to a search for new approaches to organizing the life of society. One of them is the concept of post-globalization, the developer of which is I. Wallerstein and many modern researchers (Skorodumova, 2017; Wallerstein, 2003, 2013).

In the XXI century, there has been a sharp increase in the pace of life in all areas, the intensification of information exchange processes, and the production of innovative solutions. It is reflecting the growing dynamics of society Gates (2001). Gates draws attention to the need for a change of innovation as a condition for survival in a sharply increasing competition. In pursuit of innovative solutions, firms are forced to turn to new technologies for processing and collecting information, such as crowdsourcing. The proliferation of crowdsourcing for non-standard tasks (Howe, 2008) erodes the notion of professional competency. The main thing is to solve the problem itself, by whom, in what way it will be solved, it becomes secondary. At the same time, responsibility for the negative consequences of

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innovation also recedes into the background. Many concepts lose their strength, for example, such as "professional" ethics, "moral responsibility of a scientist," which are supported by the professional corporate community. This situation leads to the risk of amateurism because a non-standard individual initiative acquires the status of the best solution without taking into account the systemic, synergetic, and ethical consequences of its application.

The processes of globalization lead to the erasure of national specificity and the destruction of orientation on the values of national culture. The processes of globalization give rise to harsh exploitation up to the appearance of veiled forms of slavery. The withdrawal of transnational production to countries with cheap labor, and the orientation toward obtaining superprofits led to the risk of a sharp increase in inequality, the gap between wealth and poverty. This situation creates hotbeds of tension in almost all countries of the world. A study by Stiglitz (2015) showed that "by 2007, 0.1 % of the top of American households had incomes 220 times higher than the average income of households, amounting to 90 %" (p. 74). Intensive robotization, characteristic of the fourth industrial revolution, strengthens the process of stratification of society. Those who are left without work are ready for any working conditions. This gives rise to new forms of slavery, which are higher in severity of human exploitation than traditional slavery. Bales (2004) presented the study of this social process in the work "Disposable People. The New Slavery in the Global Economy. Bales shows that the absence of legal norms that classify slave labor and distinguish its features leads to the fact that transnational corporations, bringing production to developing countries with illiterate people in pursuit of superprofits, widely use extreme exploitation of the population. Bales Kevin draws attention to the fact that transnational corporations do not provide people with any social guarantees in case of injury or illness, work safety, rationing of working hours, and other challenging life circumstances. Modern employers operate in conditions of mass unemployment, using sophisticated psychological technologies for processing consciousness. By concluding pseudo-contracts, modern employers have the opportunity to exploit an employee in developing countries with an undeveloped social protection system without any restrictions. The work period for such an employee is reduced from 5 to 10 years, after which he becomes either disabled or dies. In 2015, according to official statistics (Lebedinets, 2016), the number of slaves was 27 million.

The possibility of exploitation and a sharp increase in inequality in developed countries is based on the latest achievements of the fourth industrial revolution. Modern information technologies based on artificial intelligence allow analyzing digital human footprints in virtual space. On this basis, information technology allows identifying what worries and excites a person, and then deliberately influence him in order to make profit and superprofits.

On the example of aggressive marketing technologies using big data, O'Neil (2016) shows the possibilities of analyzing the problems of potential consumers and using them to attract the purchase of a service. As a result of the analysis of digital footprints on the Internet, the most vulnerable categories of potential consumers of commercial, educational services are identified. Depending on the nature of the difficulties and problems they are experiencing, they are offered to quickly solve them with the help of obtaining an education, which required obtaining loans, leading to an even more significant deepening of social difficulties. The objects of attention and psychological treatment are people who have lost their jobs, single mothers, people who are disappointed in life due to the loss of loved ones, who have recently

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left prison or a drug treatment hospital. An analysis based on big data allows identifying a problem whose solution is fundamentally essential for a person. Based on the analysis of the potential consumer, he is offered options for solving his vital problems. For example, he is convinced that having spent money on education will surely solve his problem, and his life will improve qualitatively. The risks posed by digital footprint analysis are present not only in marketing. Digital footprint processing technologies are widely used by destructive religious organizations, including ISIS, to recruit their supporters. There is an increase in the active use of new network technologies, including blockchain and self-learning programs based on artificial intelligence, by criminal structures to realize their criminal goals. Significant criminal gangs are actively buying up databases, forming teams of programmers to adapt software from open access and purchased through frontmen from leading corporations. These processes indicate the use of criminal groups of big data and the development of new strategies based on artificial intelligence (Ovchinsky, 2018).

No less dangerous are the risks associated with cultural transformations. Globalization processes lead to the loss of national-cultural identity. The achievements of the fourth industrial revolution create new opportunities for the destruction of any identity, including the human one. There is an ongoing transformation of the traditional education system (Kuzmenko et al., 2018). The transformation of education causes side effects associated with the undermining of national-cultural identity. The ideological basis for the destruction of identity is postmodernism, with its installation in place of the replacement of social and cultural roles. The essential characteristics of personality are blurred. Gamification becomes the core principle of the organization of social space. For example, today, a resident of Russia feels Russian and Orthodox. Tomorrow, he decides that he is an atheist and cosmopolitan. Moreover, the day after tomorrow, he will appear already in the form of a virtual personality immersed in the "deep web". The integrity of the personality is lost. A person turns with an ever-changing set of fragmentary roles. These roles depend on the circumstances, are tried on like masks, without the deep foundations affecting of his essence.

Physicality, which is one of the significant characteristics of identity, is also subject to deformation with the help of various kinds of extreme bodily practices (Horuzhy, 2005). By experimenting with the body, a person is experimenting with sex. In elementary school in many European countries, the teacher is obliged to talk with the child about whom he likes best to be. One of the significant issues discussed is the issue of the gender of children. Awareness of one's identity is associated not only with the body but also with the state of consciousness. The cultivation of interest in the practices of transition to altered states of consciousness also destroys a person's personality, undermines the idea of his human essence (ASC, 2012).

Along with the widespread practice of entering into a trance state, the practice of achieving the effects of altered consciousness through immersion in virtual reality is becoming widespread. Trance practices that have been around for centuries are based on the use of natural and chemical drugs of narcotic effects, physical and respiratory exercises. Current practices are based on imitation of the cultural environment and the of a personal attitude formation, on the appearance of altered consciousness state.

In Western Europe, experiments are actively being conducted using virtual reality technologies to alienate the body: out-of-body experiments (Ehrsson, 2007). Man creates the illusion of the existence of

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his body separately from him. This illusion leads to the destruction of the integrity of the personality: the body can exist in itself consciousness – in itself. Experiments related to observing human behavior while completely immersed in virtual reality show that it is possible to exercise complete control over the subject's attention (Zinchenko et al., 2010).

Dynamism, saturation with bright colors, the ability to perform actions that are not available in reality make the virtual world especially attractive. Immersion in the virtual world of people creates the conditions for the formation of their own culture of the virtual world with given stereotypes of behavior, with specific value orientations or their complete absence. Ultimately, this culture can lead to the formation of attitudes that are reproducible in the real world. There are unprecedented strategies for human manipulation, especially in childhood and adolescence. So, there is the possibility of complete control over the attention of a person immersed in the virtual world. Modern technologies are capable, per the given settings, selectively select the necessary stimulation, analyze the reaction, and adjust it according to the set goals. The experience gained in the virtual world is then transferred to the life situations of the real world. Unfortunately, immersion in virtual reality can be used not only for educational purposes or for the correction of diseases. Virtual reality technologies are widely used for destructive manipulation of public opinion, zombie consciousness in order to grossly discredit political opponents.

An example is a release in 2019 by an American company of a new version of the famous Call of Duty: Modern Warfare game in the world. In this game in a fictional country, in which Syria is easily guessed, the Russian military kills, rapes, and mocks civilians, including children, and drops other bombs on them. In the game, ehe image of the Russian is formed as an aggressive, never-ending villain who has lost his human appearance.

The deconstruction of being proclaimed by postmodernism leads to the apologetics of the cult of death. As Kutyrev (2006) notes, nothing is being replaced by Genesis. A new direction of philosophical reflection arises – "nothing-logia." Loss of identity, separation of physicality, and change in the forms of consciousness leads to the decomposition of the subject, to the loss of his integrity, which means virtual or real death. Death becomes a desired goal; various practices are being developed to achieve it. Postmodernism cultivates death as a transition to the new existence of man in the form of a superman: "this is the advent of a new form, not God and not man, and we can hope that it will not be worse than the previous two" (Deleuze, 1998, p. 64).

"Death," "emptiness," and "nothing" become the basic categories of philosophy in the era of the fourth industrial revolution. Most researchers record the decay of the homo sapiens personality, which is deepened by the achievements of the fourth industrial revolution (Dugin, 2004; Pavlenko, 2010; Saenko, 2012).

Levelling national, cultural, and gender identities lead to a search for opportunities for a virtual existence. Death becomes desirable, and the process of preparing for death is in demand. The virtual world offers a different, brighter, and more prosperous existence, which leads to a sharp rise in the number of suicides.

Existence in the real world is becoming increasingly dependent on the virtual. Distribution of virtual voice assistants, such as Alice, Cortana, Xiaoays, Siri, Alexa, involves access to an array of

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personal data. Moreover, their analysis of personal data by artificial intelligence and the issuance of recommendations taking into account the mental and emotional characteristics of a person. Corporations that develop these systems and collect information about specific people perform the function of socialization agents. Virtual assistants can adapt to the user based on technologies of emotional intelligence. These options allow virtual helpers carrying out education than parents or school more effectively and lead to emotional and psychological dependence on the system. It becomes the leading authority, friend, and assistant. Traditional social institutions are relegated to the background. There are risks of manipulating the education process and its specified purposes implementation under the strict control of an algorithm capable of recognizing and leveling any deviations from the general line.

4. Purpose of the Study

The study aimed to highlight and characterize the specifics of the leading social risks and cultural transformations during the period of the entry of modern humans in the era of the fourth industrial revolution.

5. Research Methods

The study is carried out using general theoretical methods and methods of philosophical analysis. The comparative analysis made it possible to identify the specifics of the risks of modern society generated by various actors, to identify their specifics, and to analyze the nature of manifestation. Based on a systematic approach, interconnections and interdependencies between various social risks were established. The synergetic approach has revealed the emergence of new qualities when immersed in virtual reality. This study is based on the ascent method – from the concrete to the abstract, from the abstract to the concrete. Based on this method, the general trends of cultural transformations in the era of the fourth industrial revolution were identified and analyzed. The dialectical approach allowed analyzing the different content of the consequences of the widespread dissemination of new network social technologies, artificial intelligence, virtual reality technologies, the risks arising from them, both from the side of their innovative capabilities and from possible destructive factors.

6. Findings

Analysis of the sociocultural situation of the modern era shows that there is a significant deepening of the risk of inequality, which is due to the development of robotics and systems with elements of artificial intelligence. Rising unemployment creates opportunities for new hard forms of exploitation, similar to slavery. The widespread use of crowdsourcing technologies leads to the risk of amateurism, which leads to the erosion of the concepts of “professional ethics” and “moral responsibility of a scientist.” The use of big data and artificial intelligence creates favorable conditions for manipulating a person based on the identification of life problems and unfulfilled desires. There is a tendency for the criminal worlds to use the capabilities of new social networking technologies actively. In the framework of cultural transformations, there is a striving to level not only national-cultural identity but also gender and universal. The use of virtual reality technologies stimulates new methods of transition to altered

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forms of consciousness and existence outside the body. The complete loss of identity and the desire for dissolution in a virtual environment are stimulated. The emergence of preferences for the virtual world to the real world is actively promoted by virtual voice assistants, assuming the functions of socialization agents, close friends, and interlocutors.

7. Conclusion

Reducing the risks caused by the achievements of the Fourth Industrial Revolution is possible on the way to the active policy of national states to develop targeted programs. The creation of additional jobs can support national-cultural traditions, form the entertainment industry, including computer games, taking into account value orientations and visual images that reflect historical events and the presence of social life, taking into account mentality and aesthetic preferences. It is advisable to develop virtual voice assistants, trained on arrays of achievements of national culture, implementing socialization, based on the strategy of forming a responsible, creative, and patriotic personality. It is necessary to develop legislation and algorithms to create a high-quality and comprehensive examination of software products, including those based on artificial intelligence used on the national market, in order to identify their possible destructive effects.

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