A New Paradigm of Social Consciousness in the Conditions of the Crisis of Modern Technogenic Civilization*

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Abstract—The paper examines the crisis that has comprehended the modern technological civilization, caused by the global problems of our time, and above all, environmental problems. The paper substantiates that overcoming this crisis is one of the most important determinants of the formation and development of a new ecological paradigm of public consciousness in the conditions of the information society.

Keywords—technogenic civilization; social consciousness; information society; culture; crisis; global problems; environmental problems; ecological paradigm of social consciousness

I. INTRODUCTION

Thanks to the scientific achievements of the 20th century, the modern public consciousness created the illusion of complete controllability of natural and social processes. At the same time, the contradictions between the economic activities of society, the extensive use of natural resources, the enormous scale of waste, on the one hand, and the planet’s capacity for self-regulation (replenishment of resources, self-purification capacity of the ecosystem), on the other hand, continue to increase exponentially.

Modern humanity is systematically involved in processes that change the basis of its activity and life arrangement. Modern technogenic civilization in the form of an information society penetrates all corners of the planet. Despite the fact that many countries and peoples are subject to the same stereotypes and patterns of presence in the international arena, the “challenge of history” has already been thrown. The global problems of today determine the vector of world development, coordinated and extraordinary measures to ensure safety and survival are required of humanity. The polycentrism of world development manifested itself in stochasticity and non-linearity of historical processes, putting humanity in the face of destructive crises and confrontations [1].

There is a need for a tough revision of positions to overcome the most inefficient and crisis forms of development. Partnership, compromise, cooperation and consensus — these principles should be fundamental to master the new type of development, orient humanity to survival. They must be taken immediately to develop an optimal strategy for civilizational development. Awareness of the pluralism of social development, wandering through the labyrinths of the new “axial time” and struggling through centuries-old dogmas, prejudices, ideological cliches, does not meet with support from social actors and structures paralyzed by conservatism, weakness of the old Eurocentric social science, which cannot assess the grandeur and complexity of the upcoming changes and give a unique specificity to the development of modern technological civilization [2].

II. FORMATION OF MODERN TECHNOGENIC CIVILIZATION

From the point of view of philosophy, civilization is a special sociocultural phenomenon limited by a certain framework. The concept of “civilization” unites the social and cultural aspects of society; civilization is a stage of history that began with the escape of humanity from the primitive state and developing on the basis of the material (techno-technological for the most part) prerequisites created by it.

The term “civilization” is derived from the Latin word “civis” — citizen, and “civils” — civil, state. Through this term, the ancient Greeks and Romans distinguish their society (civil) from the barbarians as a lower level of development. The concept of “civilization” is defined by the ideas of the ancient Greeks and Romans about the advantages of living in society according to the law to which all people obey, and they are considered as civilized, i.e. possessing civil rights and relevant virtues. Peoples who do not know the law is deprived of the virtues of a free man — courage, justice, and human dignity.

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French materialists in the eighteenth century define civilized societies as based on the principles of mind, justice, and private property. At this time, ideas about the antinomy of the concepts of "civilization" and "culture" begin to take shape. Civilization constitutes a contradictory unity with culture and acts as its functional sub-division, which is connected precisely with the objective resource of culture. Civilization and culture are two different ways to realize a person’s creative powers. In a culture, everything material and practical serves the spirit. Within the framework of civilization, the spirit serves material and practical. Civilization is characterized by the way and level of mastering the forces of nature, and culture arises as a result of man’s mastery of his own nature.

In the philosophy of the XIX century, the concept of "civilization" does not have an unequivocal interpretation and is used in the sense of: 1) a synonym for culture, in the narrow sense — material culture; 2) the stages of the historical development of material and spiritual culture (ancient civilization, Christian civilization, modern civilization); 3) the stage of human development following wildness and barbarism (L. Morgan, F. Engels).

In the newest philosophy, "civilization" is understood as a form of organization of a progressive, complex and specific culture characterized by: the use of letters and weights, the effective concentration of economic and political power, the concentration of the population in cities, its differentiation into producers, traders, officials, artists and t. n.

Civilization occurs when the objectively phenomenological cultural resource enters a phase of permanently expanding its self-reproduction. Historically, this is associated with the era of the great civilizational breakthrough, when the design of the system of global cultural oppositions determines the emergence of writing and statehood. From this point on, we can talk about the civilization process that takes place within the culture. The prehistoric state, characterized by total syncretism and a static subject-phenomenological resource, can be called a culture before civilization [3].

The concept of "civilization" refers to the reproduction of labor, the increase in free time and other indicators. It indicates the functionality, manufacturability, institutionalism, education of civil communities and reflects certain types of society in the specific historical conditions of their existence.

In Europe in the XV - XVII centuries, a new historical type of civilization was formed. It is designated in modern philosophy by the concept of "technogenic civilization." The progress of science and technology, based on reason as a special value of scientific rationality, plays a major role in this type of civilization. A characteristic feature of technogenic civilization is the scientific knowledge used in production and causing a dramatic change in technic and technology through the scientific and technological revolution. The relationship between man and nature, the place of man in the production system, changes significantly. All this is reflected in the growing dynamics of social relations and transformation of the lifestyles of generations and society as a whole [4].

The increased importance of the term “civilization” led to the need for its clearer demarcation with the term “culture” used in the narrow sense. The concept of "culture" is associated with the reproduction of human personality structures through education, upbringing. Culture is not so much technological as value; it is realized through the setting of human goals and expresses an attitude towards a certain type of society and the world as a whole.

In the works of O. Spengler and N. Berdyaev, civilization appears to be the final technological and “godless” stage in the development of culture, the stage of its dying [5] [6]. Humanity is not threatened by culture, but by civilization with its uncontrolled scientific and technical progress. The development of science and technology upsets the balance between the world of people and the world of nature. Nevertheless, the ascending realization of the creative forces of man is possible only in the unity of culture and civilization, and the search for such unity is one of the most pressing problems of modern social development. The evolutionary process of cultural development is characterized by the ability to create new structures that include material culture also. A new sphere of reality is emerging — the technosphere, representing the global system of the functioning of products, the use and evolution of technology.

Most researchers believe that within the framework of technogenic civilization, two types of society are formed: industrial and post-industrial. The post-industrial stage of human development, which began in the 1950s-1960s in industrialized countries, is characterized by the social changes that are associated with advances in modern science, technology, information and other fields. It is also significant such success as advancing the tertiary sphere of economic activity (after agriculture and the industry sector) - the service sector; and also recognition of the leading role of science, knowledge; acquiring and distributing information; ensuring the management of an educated and cultural elite society, consisting of scholars and professionally trained specialists. The post-industrial society, which domestic and foreign researchers call the information society or a society based on knowledge, is the modern stage of the development of technogenic civilization [7]. The European-North American local type of civilization occupies a central place in modern technogenic civilization. Modern technologies, education systems, views of the world, humanity, and society are based on this type of civilization. The European-North American type of civilization determines the lifestyle offered to the whole world as a model.

At present, to demonstrate the level of development of various parts of the world community, economic indicators are used that divide countries according to their degree of “progressiveness” due to their economic and political development, discarding such inherent characteristics of human existence as morality and cultural identity. In fact, everything that does not fit into the “norms” of the mentality of the average European (or American) consumer is explained by the “wildness” of the peoples of the third world,
which Western culture has not reached. This shows the inflexibility and inadequacy of this assessment. How can all the uniqueness and diversity of various cultures be reduced to two or three numerical indicators such as gross national product per capita? And in general, is it legitimate to compare different cultures among themselves, building them into any kind of hierarchical structure according to the degree of approximation to a single ideal for all?

III. THE CRISIS OF MODERN TECHNOLOGY CIVILIZATION AND ENVIRONMENTAL PROBLEMS

In the framework of the European-North American local type of civilization, there are signs of a crisis in the whole of modern technogenic civilization, with an ever-increasing number of global problems. And this is a crisis not of individual aspects of being, but a crisis of the main forms of life, a systemic crisis of modern technogenic civilization, a crisis of the way of self-realization of modern man, of forms of rationality [8]. At the same time, many countries of the world, trying to reach the level of the so-called developed countries, tend to follow this path. The crisis of modern technogenic civilization is determined by a whole complex of reasons: an increase in the number of humanity by 2.5 times during the life of only one generation, the resource-intensive lifestyle of modern man in developed countries, unprecedented pollution by the waste of people in the post-industrial world of their environment, globalization of the world economy and the world information system and other reasons.

The concept of "global problems" came into scientific use at the turn of the 60s–70s of the twentieth century. These problems apply to all of humanity, affecting the interests and destinies of all countries, peoples and social strata; lead to significant economic and social changes and losses, and in case of their aggravation they can threaten the very existence of human civilization. Global problems require for their solution cooperation on a global scale. Most of these problems are interrelated. However, in the conditions of modern technogenic civilization, they are not solved radically.

One of the central places among global problems is environmental problems. They are associated with negative consequences of human activities. Let us consider the system of environmental problems. A feature of our time is the intense impact of man on the environment, which is accompanied by irreversible negative and, sometimes, global consequences, since there is no limit to the growth of human material needs, while the ability of the natural environment to satisfy them is limited [9].

The last decades of the 20th century and the beginning of the 21st century are characterized by the fact that any events and processes occurring on the planet are connected into a single whole. Every day the informational, economic, technical, social, scientific and cultural interaction of mankind only intensifies and deepens. A special feature of modern technogenic civilization is that human geochemical activity does not manifest itself directly, that is, not as a purely biological process, but is mediated by complex social relationships that take shape between people. In order for the material and technical change of the natural environment not to take a threatening form of an insurmountable environmental crisis, it must be accompanied by fundamental social changes. Without such social changes, a rational exchange of substances with nature in the interests of all people cannot be carried out. Human habitat is not compatible with anthropogenic degradation of the natural environment. Therefore, the elimination of the danger of a global environmental crisis is an essential condition for a positive transformation of the human environment [10].

For all their latitude and mobility, the adaptive capabilities of the human organism are not infinite. When the rate of change of the environment exceeds the adaptive capacity of the human organism, then phenomena occur, leading eventually to the death of people. This means that objectively there are environmental needs, the totality of which is generated by the human biological organization. Therefore, there was an urgent need to correlate the pace of environmental change with the adaptive capabilities of humans and the human population. Throughout the preceding history, this happened automatically. Drastic changes occurred relatively recently in the twentieth century, when, due to the growing threat of an environmental crisis, the shortage of natural resources and cleanliness of the habitat became increasingly acute.

Environmental issues demonstrate the level of self-consciousness of modern man and society. Environmental problems are not the result of individual errors and miscalculations of anybody, but are rooted in the very way of being of a person in a post-industrial society. However, many researchers view many environmental and other global problems as purely technological or economic, which can be dealt with through science or through economic measures.

The resource intensity of the lifestyle of the “mass consumer society” offered by the post-industrial society as a model to the whole of humanity exceeds the natural limitations of our habitat. It is possible to lead this lifestyle only at the expense of other people living on the planet. This lifestyle of the “mass consumption society” is currently practiced by about 13 percent of the world's inhabitants. They absorb about 70 percent of non-renewable resources and emit about the same proportion of pollutants. It is possible to allocate mineral fuel and atmospheric oxygen as critical resources. Their use by the “first world” countries has already caused qualitative changes in the climate (“greenhouse effect”).

IV. THE REASONS OF THE ECOLOGICAL CRISIS AND POSSIBLE WAYS OF EXITING FROM IT

The environmental crisis is due to the peculiarities of the development of modern technological civilization. To get out of this crisis, it is important to understand and accept new value orientations, moral attitudes, to create a new image of a person with environmental consciousness: in contrast to a consumer user, a humane and truly intelligent person, both to himself and to nature [11]. Without such a global philosophical restructuring of relations in the man-nature-
society system, all measures of an economic, ecological, scientific and technical nature will have only private value and will not be able to become any serious obstacle to the impending ecological catastrophe.

The main requirement arising from this installation is formulated as the subordination of all human actions to the task of preserving the environment for themselves and future generations. To do this, it is necessary to solve environmental problems in a more centralized way, considering the planet as an integral system, which inevitably leads to a contradiction with traditional Western values, based on individualism and individual freedom. The ecological situation makes it necessary in a new way to raise the question of freedom and democracy, the unity of mankind with the necessity of leading to a global revolution of world perception and value attitudes. Modern Western society is based on the principle of individualism, both individuals and individual social groups. This principle is rooted in the corresponding social structure and the corresponding ideology [12].

Recently, the key issue facing modern technogenic civilization, which has entered a critical phase, is particularly relevant: how to achieve greater practical results at the cost of less damage in the natural and social environment, how not to withdraw, and continue the potentially unlimited development process. To reach the creation of qualitatively new tools of survival, spiritual in particular, a person should go beyond the “progressive” style of thinking that gave birth to the very idea of the techno-ideological structure of society.

The principle of the current public consciousness has entered into a clear contradiction with the surrounding reality. Modern society is based on the principle of individualism, that is, egoistic separateness of both individuals and communities. In modern Western society, this principle is rooted by its corresponding structure and the corresponding ideology.

The individualistic tradition gradually reduced the spirituality of man to the rational-pragmatic management of society; it could not oppose the existing social, financial, political institutions ethical barrier, preserving the morality of the individual. Moral was out of society [13]. It was pushed out of social management to the level of the individual and gradually graded. Therefore, the actual leadership of the financial and political structures, whose political aspirations and ideology express the values of the consumer society in their pure form, turns out to be quite natural.

Material consumption for a person in the conditions of modern Western society becomes the sole purpose of being, and the so-called "spiritual life" acts only as a way of entertaining and distracting the masses from deep spiritual search, a way of satisfying mental and instinctive needs that reduce a person to the "thinking animal" in the literal sense of the word. Such a robotic person, with the lack of spiritual values and value-setting, becomes the basis of society, performing, explicitly or implicitly, the will of other people.

This way of world order — tranquility at the achieved level of social and cultural development — they are trying to impose on the whole world. The ways of implementation can be different both in terms of sources, and in scale, and in the degree of their impact on humanity. Now they have acquired such forms and scales that are dangerous not only for the existence of certain segments of the population, but also for all of humanity.

The apologists of the existing world order cannot endlessly rely on all kinds of social mechanisms, on the renewal and improvement of the social organization of society. For the entire important role that its institutions, laws and treaties play in the life of modern society, with all the power of technology created by people, it is not they that ultimately determine the fate of humanity. Today's global, and first of all, environmental problems will not be fully resolved until it itself changes its habits, customs and behavior. Human consciousness was unable to adapt to the changes that he himself introduced into this world. Since the problem that has arisen at this stage of its development is inside, and not outside the human being, taken both on an individual and collective level, then its solution must proceed, first of all, and mainly from within it.

V. THE ECOLOGICAL PARADIGM OF PUBLIC CONSCIOUSNESS

The formation and development of the ecological paradigm of the public consciousness is not a fad of the theoretical mind, but an urgent need, without which neither the survival of modern technogenic civilization, nor its further development is possible. A thinking person who has a completely different attitude to the world around her is what should be the subject of close attention of various sciences. That is, not an abstractly taken relationship between man and nature, but a new ecological paradigm of social consciousness. The goal of all modern scientific research should be the formation and development of this ecological paradigm of social consciousness, and its practical development and improvement [14].

The formation of the ecological paradigm of public consciousness is a natural process. The transition to the ecological paradigm of the public consciousness is necessary for the survival of all mankind. This transition will entail significant changes in the functioning of society. The transformation of social consciousness is a logical step of evolution, an adequate response to changes in society. At the turning points, changes occur in the perception of reality. A new ideology arises on the basis of a new picture of the world. Responsibility takes precedence over freedom, solidarity over individualism, a systemic view of any action makes you predict a chain of consequences, and therefore prohibits actions that cause irreversible processes, and naturally.

For the new ecological paradigm of public consciousness, an understanding of the absurdity of regulatory pressure on other types of sociocultural environment should be characteristic. Belonging to a class, social stratum or social, confessional or ethnic group should be perceived as
something secondary. The primary type is the type of "reasonable man." In its activities, a person must proceed from the interests of mankind as a whole.

The central point of the ecological paradigm of public consciousness is the formation and development of ecological consciousness [15]. Environmental consciousness will be understood as a set of ecological and environmental concepts, worldviews and attitudes towards nature, as well as strategies of scientific and practical activities aimed at natural objects. In modern times, a person needs to be reoriented towards an awareness of the need to preserve the planet and its resources as a living environment, and the formation of environmental consciousness among the younger generation.

The need for a transdisciplinary approach to the analysis of the genesis and evolution of environmental consciousness in the conditions of the information society is conditioned not only by the environmental challenges of a technological civilization, but also by the totality of the causes of a sociocultural plan [16]. The most important among them is the further evolution of consciousness, the main milestones of which are: 1) changing the economic paradigm of the public consciousness inherent in the last two centuries to a new ecological paradigm of public consciousness; 2) awareness of the essence of man as a cosmo-bio-psycho-socio-spiritual being; 3) the transformation of man from the subject of individual and social group development into the subject of planetary development. It should be noted that the origins of a new type of consciousness go back to the system of ideas developed at the turn of the XIX and XX centuries and received the name of Russian cosmism.

Environmental consciousness should be considered as a systemic quality, which is generated and developed in interaction with the environment (socio-cultural and natural) and which allows a person to directly feel and experience unity with other people, nature and his own 'I'. Ecological consciousness allows one to understand the inherent value of objects of living nature, other people and oneself as various manifestations of the natural process of the development of life on the planet.

VI. CONCLUSION

An important role in the development of modern technogenic civilization acquires the adoption of new values and moral attitudes, designed to form a person with ecological awareness. In contrast to the human consumer of the era of the domination of the economic paradigm of the public consciousness, a man of the epoch of the dominance of the ecological paradigm of the public consciousness should appear, humane and rational both to himself and to nature. Without this global philosophical restructuring of relations in the "man-nature-society" system, all measures of an economic, ecological, scientific and technical nature will have only a particular importance and will not be able to become any serious obstacle to the impending ecological catastrophe.

Understand the nature of the current crisis of technogenic civilization, equip humanitarian goals and values with the paradigm of modern public consciousness, streamline and bring environmental problems under the control of humanity — this is the need to create a new ecological paradigm of public consciousness.

REFERENCES

[1] N.N. Gubanov and N.I. Gubanov, "Mental Responses to Risks in Modern Society", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series “Advances in Social Science, Education and Humanities Research”, vol. 283, pp. 1003-1007, 2018. DOI: 10.2991/cesses-18.2018.220
[2] V.A. Inozemtsev, M.L. Ivleva, V.Yu. Ivlev, "Artificial intelligence and problem of computer representation of knowledge" // Proceedings of the 2017 2nd International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2017). Series “Advances in Social Science, Education and Humanities Research”, vol. 124, pp.1151-1157, 2017. DOI: 10.2991/cessesh-17.2017.268
[3] V.A. Nekhamkin, "A counterfactual Challenge of the Past: Ways of Negotiation", Herald of the Russian Academy of Sciences, vol 87, no 2, pp. 191–198, 2017. DOI: 10.1134/S1019331617020046
[4] B.N. Zemtsov and T.R. Suzdaleva, "History as a Science", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series “Advances in Social Science, Education and Humanities Research”, vol. 283, pp. 752-755, 2018. DOI: 10.2991/cesses-18.2018.166
[5] O. Spengler, Sunset of Europe, Moscow: Thought, 1998.
[6] N.A. Berdyaev, "Man and Machine", Path, no. 38, pp. 3-38, May 1933.
[7] V.A. Inozemtsev, V.Yu. Ivlev, M.L. Ivleva, V.E. Uдовic, Information Society and the Formation of a New Epistemological Paradigm of Modern Science, Moscow: ITO Semrik, 2013.
[8] V.A. Inozemtsev, "The Formation of the Ecological Paradigm of Thinking as Overcoming the Crisis of Technogenic Civilization", Psychological Adaptation and Psychological Health of a Person in Complicated Conditions of the Living Environment, Moscow, pp. 504-515, 2013.
[9] V.Yu. Ivlev and M.L. Ivleva, "Philosophical Foundations of the Concept of Green Economy", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series “Advances in Social Science, Education and Humanities Research”, vol. 283, pp. 869-873, 2018. DOI: 10.2991/cesses-18.2018.192
[10] B.N. Zemtsov and T.R. Suzdaleva, "Ecological Law of Russia: Milestones of Formation", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series “Advances in Social Science, Education and Humanities Research”, vol. 283, pp. 329-332, 2018. DOI: 10.2991/cesses-18.2018.74
[11] V.A. Inozemtsev, M.L. Ivleva, "Formation of the environmental consciousness of students in the context of the modern educational environment", Proceedings of the 16th International Scientific Conference "Sakharov Readings 2016: Environmental Problems of the 21st Century", Minsk: International Sakharov Environmental Institute of Belarusian State University, 2016, p. 12.
[12] N.N. Gubanov and N.I. Gubanov, "Mental Bases of Social Solidarity", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2018). Series “Advances in Social Science, Education and Humanities Research”, vol. 283, pp. 998-1002, 2018. DOI: 10.2991/cesses-18.2018.219
[13] N.I. Gubanov and N.N. Gubanov, "Criminal behavior: biological, social and personal conditionality", Vestnik slavianskikh kultur – bulletin of slavic cultures-scientific and informational journal, vol. 48, no. 2, pp. 53-66, 2018.
[14] V.A. Inozemtsev, M.L. Ivleva, "The Formation and Development of the Ecological Paradigm of Public Consciousness", Materials of the 17th International Scientific Conference "Sakharov Readings 2017: Environmental Problems of the XXI Century", Minsk: BSU, 2017, pp. 60 - 61.

[15] V.A. Inozemtsev, Yu.V. Inozemtseva, "Ecological Consciousness and Information Resources", 7th Russian Conference on Environmental Psychology. Abstracts, Moscow: FSBI “Psychological Institute of RAO”; SPb.: Nestor-History, pp. 208-211, 2015.

[16] V.Yu. Ilev, M.L. Ivleva and V.P. Sedyakin, "Information Metaphors and Classification of Information Sciences", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSSES 2018). Series “Advances in Social Science, Education and Humanities Research”, vol. 283, pp. 874-879, 2018. DOI: 10.2991/cesses-18.2018.193.