



Evolution of Views on “Technogenic Civilization”

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Abstract

The article reveals the essence of the concept of technogenic civilization and its specific aspects. In the conditions of technogenic civilization, the relationship between man and technology is revealed. The influence of technogenic civilization on the process of globalization and its manifestations, the role and importance of technical means in human life are analyzed on the basis of literature.

Keywords: *Civilization; Technogenic Civilization; Traditional Civilization; Technosphere; Globalization*

Introduction

Scientists recognize that many civilizations have emerged during the historical development of mankind as a result of research while studying the meaning of the concept of civilization. The English sociologist and historian A. Toynbee used the concept of civilization to express a unique and relatively closed society (Отамуратов, 2015, p. 43), and he determined that there have been a total of 21 civilizations in the history of mankind. He even notes that six of them still exist today Тойнби, 2010, p. 97), whereas the German philosopher O. Spengler, in the sense of the antipode of culture, using it to characterize the stage of the process of cultural destruction (Отамуратов, 2015, p. 42), notes that approximately ten civilizations arose (<https://globalaffairs.ru/articles/skolko-na-zemle-civilizacij/>). Scientists divide them into two groups based on the stages of civilization’s development. 1) traditional civilizations; 2) man-made civilizations Крылов, 2014, p. 4).

Each era’s civilization has left an indelible mark on people’s minds with its innovative character and features not found in others. All civilizations in the evolution of humanity appear to be oriented toward the next stage, embodying new characteristics and presenting people with unique new opportunities. Similarly, in terms of form, content, and essence, today’s modern civilization fundamentally differs from previous traditional civilizations. Its uniqueness is defined by developing an innovative approach based on current intellectual, scientific, technical, and technological progress. As a result, modern intellectual development, innovative processes, and activities have resulted in man-made civilization. Man-made civilization emerged in Europe between the 15th and 17th centuries and is a distinct form of development. It is a historical period in the evolution of Western culture. At the end of the twentieth century, man-made civilization spread throughout the world’s countries.

The Main Part

Today, civilization manifests itself in three forms: cosmogenic, technogenic, and anthropogenic. Ancient Babylon, ancient Rome, ancient Greece, ancient China, ancient India, and other civilizations related to medieval Europe are examples of cosmogenic civilizations. The main principle of cosmogenic civilization is to ensure the supremacy of traditional news (<http://siblec.ru/index.php?dn=html&way>). Technogenic civilization refers to a particular type of social development. It first appeared in Western European culture during the 15th and 16th centuries (Гизо, 2007; Морган, 1900; Энгельс, 2007; Ясперс; 1994; Данилевский, 2003; Тойнби, 2006; Вебер, 2001; Белл, 2004; Ростю, 2003; Тоффлер, 1999). Anthropogenic civilization is a social development model based on reevaluating our traditional values. The ongoing technogenic civilization gives way to anthropogenic civilization in the revision of the socio-cultural situation of each developing society (Журавський, 2003, p. 163).

The development of man-made civilization represents fundamental changes in society, in the natural and artificial technospheres, as a result of science and humanity's technical and technological activities. In other words, the genetic basis of the term "technogenic" is science and technology based on technologies that affect the underground system, including society, the biosphere, and people. As a result, the origins and evolution of the term "technogenic" are primarily associated with the social, biosphere, natural, and artificial systems, objects, and processes that are implemented in response to anthropogenic and technological factors. V.S. Stepin, a Russian scientist, attempts to explain the development of man-made society in relation to the Western European industrial revolution, industrialization, social revolutions, technical and, later, the acceleration of scientific and technological changes, a fundamental change in the socio-natural environment of life (Степин, 2015, p. 542).

In the course of researching the impact of man-made civilization on nature, O. Yoldoshev distinguishes several stages of its historical development and focuses on specific aspects. "There are three types of stages in the historical development of man-made civilization. The first is "pre-industrial civilization", the second "industrial civilization," and the third "post-industrial civilization"... In the third stage, the impact of technology on nature has become so severe that it is irreversible. As a result, negative aspects of man-made civilization started to emerge" (Йўлдошев, 2018; Yoldishev, 2018).

The famous German philosopher and psychologist Carl Jaspers (1883–1969) "divides the historical development of humanity into stages and expresses the process of emergence of man-made civilization. In *The Sources of History and Its Purpose*, he divided the history of society into four stages: prehistory, the great historical culture of antiquity (local events), axial history (the beginning of world history), and finally, "technical" civilization (the transition to unified world history). According to him, the state of unity of world history was created by Europe, which dominated the world for a long time due to its technological superiority" (Муратова, 2020, p. 21). The Renaissance in Europe was the catalyst for the emergence of such an approach. The Western Renaissance ushered in and popularized great scientific discoveries, resulting in a radical shift in world civilization. The Western world's culture of techniques and technologies is the foundation for the formation of modern man-made culture.

Samuel Huntington, an American philosopher and political scientist, is particularly interested in the evolution of man-made civilization. Man-made civilization is defined by philosopher-scientists as "... based on an industry that can progress from manual labor to classical heavy industry, then to knowledge-based technologies and production" (Хантингтон, 2020, p. 75).

Stephen Hawking, a well-known physicist from the United Kingdom, believes that in the conditions of man-made civilization, a fierce struggle will occur based on the dialectic relationship between technical means and human consciousness. As a result of the advancement of computer

technologies, a general crisis in human life may occur. That is, he explains that there is no danger when computer intelligence lags behind human intelligence but that eventually, his “brain” will work better and faster. The computer mind then takes over control of the human biological mind. And this is a person’s “smart person” crisis. As a result, the computer controls all of the most important resources and means of life on the planet, including energy, transportation, defense, and information (Қахқорова, 2009, p. 86).

According to Klaus Schwab, the founder and executive chairman of the World Economic Forum, the International Organization for Public–Private Cooperation, modern man–made civilization has not yet reached its pinnacle. That technology is rapidly approaching a tipping point. At the same time, there are several potential hazards, so Biolan emphasizes that techniques and technologies can also provide opportunities for environmental protection and restoration. Klaus Schwab recognizes modern civilization as a whole and divides it into four parts based on the industrial revolution.

“From about 1760 to 1840, the first industrial revolution occurred. This process, fueled by railroad construction and the invention of the steam engine, ushered in mechanical manufacturing. Mass production became a reality after the invention of electricity and the assembly line during the second industrial revolution, which began in the late nineteenth and early twentieth centuries. In the 1960s, the third industrial revolution began. Because of the development of semiconductors, the mainframe computer (the 1960s), the personal computer (1970s–1980s), and the Internet, it is also known as the digital revolution or the computer revolution (1990s). Given the concepts and scientific evidence used to describe the first three industrial revolutions, we are now on the verge of the fourth. It arose at the start of the twenty-first century and was based on the digital revolution” (Шваб, 2022, p. 18).

The philosophical meaning of the concept of “technogenic civilization” was revealed among the first in the book “Scientific view of the world in the culture of technogenic civilization” (Степин, 1994, p. 274), co–authored by Russian philosophers V.S. Stepin and L.F. Kuznetsova. The book describes the origin of the concept of man–made civilization as follows: “man–made civilization” ... refers to a specific type of civilization development that appeared in Europe during the formation of early capitalism and is often called Western civilization according to its region of origin (Степин, 1994, p. 3). So, the cultural development in the Western region was created, formed, and developed differently compared to the culture of other countries of the world. The unique appearance of the current civilization in the world arose precisely in the West. Therefore, the civilization formed in the West was seen as a man–made civilization.

“Technogenic civilization, (literally – civilization produced based on technology) – is the current civilization period that has arisen due to the introduction of scientific and technological progress, and any problems that arise in society is a solution”, write Russian philosophers S.I. Nekrasov and N.A. Nekrasova (Некрасов, 2010, p. 275). Science, in fact, is the foundation of all innovations, discoveries, and innovations. Today, any advancement is defined by applying scientific and technological knowledge in practice. The force and mechanism that forms man–made civilization is the practical materialization of scientific and technological knowledge. The author sees “technogenic civilization” as a recognized component of development, its materialized form, and techniques and technologies as a factor in resolving existing problems. On the one hand, this approach is correct, but if it stems from today’s global ideological and ideological processes (information attacks, ideological pressures, ideological pressures, and the use of man–made civilization’s results as a tool in the implementation of various evil ideological goals); first, man–made civilization is not only the result of current development results but also a means of realizing each country’s plans and goals. Second, while being a factor in preventing societal problems, it can also cause the spread of “popular culture”, illegal arms trade (primarily through social networks and internet sites), and several global problems such as environmental pollution. For example, intensifying the arms race between highly developed countries can be viewed as undermining developed countries’ national sovereignty, depriving peoples and nations of their past, and increasing economic dependence.

V.A. Kutryov, a well-known modern Russian philosopher–scientist, examines modern man–made civilization from a philosophical and anthropological standpoint. He refers to man–made civilization as a “civilization of universal systems and networks dominated by technical and informational rationality” (Кутырёв, 2015, p. 45). The world’s technological process accelerates practical activities such as the growth of the consumer society, the replacement of any activity subject’s tasks with digital algorithms, and the involvement of robotic technologies in material and immaterial production activities. It transforms a person into a component of the artificial environment. “Man–made civilization is an artificial (machine) environment, which is created only technically and violates the boundaries of the natural–social environment, without taking the spiritual dimension into account,” writes V.A. Kutryov (Кутырёв, 2015, p. 45). He defines “man–made civilization” as an “artificial” environment that destroys humanity and causes negative changes. On the one hand, an artificial environment based on human–created techniques and technologies has emerged. Still, man–made civilization aims to meet people’s material and spiritual needs, to look forward with optimism, to revolutionize social lifestyle, to achieve economic development, to save, and so on. It was designed to be viewed as a means of carrying out development–oriented actions. In any case, it is essential to remember that man–made civilization, as a result of people’s intelligence and intellectual potential, was created primarily to produce positive outcomes. Some forces use science, technology, and technology to further their ends. However, this does not imply that man–made civilization is a generally negative process.

While not denying the positive aspects of man–made civilization, Professor S. Otamuratov emphasizes the need to pay more attention to the negative aspects that it may cause. “Regardless of how glorious the principle of today’s civilization (man–made civilization – A.A.) sounds to nations that have made little progress and are now embarking on the path of development, their interest in it is far less than that of developed nations, and it is even tragic for nations that do not try to understand its negative consequences today” (Отамуратов, 2015, p. 89). At the same time, it should be noted that the achievements of man–made civilizations are a factor that contributed to the globalization process. “Globalization would not have emerged as a process if modern science, technique, and technology had not developed at an unprecedented level, if they had not been popularized by highly advanced communications” (Отамуратов, 2015, p. 79). Thus, globalization as a process would not have occurred without man–made civilization and its outcomes. Techniques and technologies that are developed and discovered spread rapidly among people, particularly young people because teenagers are the first to consume news. According to this viewpoint, the advancement, development, and popularization of science, technology, and technology influence globalization’s emergence and rapid acceleration as a process.

“The last 20th century was a century equal to several thousand years in terms of socio–historical weight, the influence of events, and importance for human civilization,” says Professor A. Kadirov. Mankind conquered not only the microcosm, but also the universe and discovered the laws of human heredity.

Computer technology, robot technology, automatic control systems, the global information network – the Internet, and so on are 20th–century marvels. The distance between countries and even continents shrank in the twentieth century, making it possible to receive or exchange information from anywhere in the world in a matter of minutes. Economic, political, and cultural relations worldwide have begun to converge. As a result of globalization, relations of cooperation on a global scale have begun to emerge”, he says (Қодиров, 2006, p. 90). The evolution and progress of man–made civilization is explained in relation to advances in science, technology, and technology. In fact, the scientific and technological revolution that occurred in the middle of the twentieth century resulted in a radical change in the lives of people all over the world. On the one hand, scientific, technological, and technological advances ensured the rapid massification of globalization. On the other hand, globalization appeared as a

universal process that caused news and discoveries in science, technology, and technology to be seen on the face of the world and enter the lives of people worldwide.

J. Ochilov, Ph.D., defines “man-made civilization” as “the constructive-rational technological methods and tools of socio-political institutions aimed at creating the necessary conditions for the economic life of current and future generations, as well as the ecological lifestyle of a specific nation, state, and world culture”. It is the stage of society’s development that corresponds to the level of realization of potential technogenic, anthropotechnogenic uses of it (Очилов, 2018, p. 12).

The author focuses on the fact that man-made civilization is the stage of development of society that provides the necessary conditions and opportunities for nations and peoples’ economic and ecological lifestyles today and in the future. Man-made civilization demonstrates its particular significance as a process that creates and satisfies the needs, demands, and desires of people, nations, and peoples not only today but also in the future. That is why all countries, peoples, and nations today regard man-made civilization as a process that serves universal interests. This valuable attitude and attention contribute to the strengthening and improving of man-made civilization’s status. Man-made civilization is now imprinted in people’s minds and thinking as a stage of society’s development with necessary conditions and opportunities for social, political, cultural, and spiritual life in the future, not just economic and ecological way of life.

Thus, “technogenic civilization” refers to a massive shift in the fields of science, technology, and technology that results in a radical shift (modernization) in the culture, thinking, and lifestyle of people, nations, peoples, and countries toward sociopolitical, economic, cultural, and spiritual elevation is a new advanced civilizational stage.

Conclusion

To summarize, the new civilization that humanity has created and continues to create with its intelligence and intellectual potential has altered the rhythm of life in unprecedented ways. Today, we can be immediately aware of the most minor changes taking place in the most remote areas of the world through large and small technical means such as radio, television, mobile communication devices, the Internet, intelligent technologies, nanotechnologies, and robotic machines, and any changes taking place in the field of science, technology, and technology are immediate. We live in a time when significant opportunities are entering people’s lives. This is, of course, the highest level of achievement achieved as a result of mankind’s intelligence and intellectual potential, as well as its characteristics as tools that help to solve today’s modern problems and unite countries, nations, and peoples around the world around certain noble, universal ideas. is significant in conjunction with considering these factors, the reasons for the emergence of today’s civilization – man-made civilization both as a concept and as a process, the factors that develop it, the search for its foundations, the complete understanding of its meaning, its essence, the study of its specific aspects, its connection with traditional civilizations and analysis of various aspects, the study of issues such as influence on the fate of countries, nations, and peoples is an urgency.

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