

Modern Approaches to the Problem of Technogenic Civilization: a Socio-philosophical Analysis

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Abstract

Relevance. In the modern era, the rapid advancement of technology and its profound impact on human life make the study of technogenic civilization essential. Processes such as artificial intelligence, automation, and digitalization are transforming the socio-economic and cultural structures of society, leading to new ethical and philosophical challenges. In this regard, examining the role of technogenic civilization and assessing its consequences constitute a significant scientific issue. Technogenic civilization represents the modern stage of humanity's development and embodies the dialectical model of civilization and culture shaped by the penetration of technology into our lives.

Objective: 1. To analyse the development of technogenic culture, examining its characteristics at various stages and its impacts on society; 2. To investigate the changes created by technology in social, political, economic, and cultural structures.

Results. This article analysed the phenomenon of technogenic civilization from philosophical and sociological perspectives, examining its impact on various aspects of society. Technogenic civilization refers to the developmental stage formed by the integration of technology into social life, fundamentally altering human interaction with nature and the social environment. The article discusses the changes brought about by technology in the social, economic, political, and cultural spheres in the context of the three main stages of technogenic civilization. Technogenic civilization is not only based on technological innovations, but also on the widespread acceptance and application of these innovations by society.

Conclusions. Technogenic civilization, by considering the impact of technology on both individuals and society, demands the establishment of a new normative framework and the identification of future potential.

Keywords: social philosophy, technology, philosophy, culture, technogenic culture, human and civilisation, human-technology relations

Сучасні підходи до проблеми техногенної цивілізації: соціально-філософський аналіз

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Анотація

Актуальність: У сучасну епоху стрімкий розвиток технологій та їхній глибокий вплив на життя людини роблять дослідження техногенної цивілізації вкрай важливим. Такі процеси, як штучний інтелект, автоматизація та цифровізація, змінюють соціально-економічні та культурні структури суспільства, спричиняючи нові етичні та філософські виклики. У цьому контексті вивчення ролі техногенної цивілізації та оцінка її наслідків становить важливу наукову проблему. Техногенна цивілізація представляє сучасний етап розвитку людства і втілює діалектичну модель цивілізації та культури, сформовану проникненням технологій у наше життя.

Мета: 1. Проаналізувати розвиток техногенної культури, дослідити її особливості на різних етапах і вплив на суспільство; 2. Дослідити зміни, що виникають під впливом технологій у соціальних, політичних, економічних та культурних структурах.

Результати: У цій статті проаналізовано феномен техногенної цивілізації з філософської та соціологічної точок зору, розглянуто її вплив на різні аспекти суспільства. Техногенна цивілізація є етапом розвитку, сформованим інтеграцією технологій у суспільне життя, що докорінно змінює взаємодію людини з природою та соціальним середовищем. У статті розглядаються зміни, які технології спричинили в соціальній, економічній, політичній та культурній сферах у контексті трьох основних етапів техногенної цивілізації. Техногенна цивілізація базується не лише на технологічних інноваціях, а й на широкому прийнятті та застосуванні цих інновацій суспільством.

Висновки: Техногенна цивілізація, враховуючи вплив технологій як на окремих осіб, так і на суспільство в цілому, вимагає встановлення нових нормативних рамок та визначення можливих перспектив майбутнього.

Ключові слова: соціальна філософія, технології, філософія, культура, техногенна культура, людина і цивілізація, взаємозв'язок людини та технологій

Introduction.

The issues facing contemporary technological civilization are a major topic of discussion in sociophilosophy across the world. The socio-structural dynamics of human civilization are altered by rapid technology growth, posing a variety of ecological, ethical, and anthropological problems in addition to new opportunities. In this regard, philosophical study is necessary to understand how technological changes affect the fundamentals of human life, social interactions, and value systems. Studying these topics is especially important for preserving the harmony between humanism and technology. As a result, a socio-philosophical analysis of the nature of technogenic civilization and its effects on society is necessary in the modern day.

Materials and Methods. The article primarily employs historical-methodological analysis and comparative analysis methods. In examining the various stages of technogenic civilization's development, its impact on socio-economic and cultural structures is also explained through dialectical analysis. The methodological justification of this research involves the use of various theoretical and empirical methods to explore the impact of technogenic civilization on society at different stages. The goal of the study is to understand the integration of technology into human life and its effects on the social, cultural, economic, and political spheres. The main methods underpinning the methodological approach are as follows:

1. Historical and philosophical analysis: Historical and philosophical approaches were used to analyze the different periods and stages of the development of technogenic civilization.

2. Comparative analysis: This method was employed to compare the development of technogenic civilization and the integration of technology into various societies and cultures.

3. Philosophical and ethical analysis: The impact of technology on ethical values, human rights, and culture was discussed. In this context, the way in which technogenic civilization shapes human existence and how this process leads to ethical and cultural changes was explored.

4. The methodological framework of the study allows for a broader social and cultural perspective on the development of technogenic civilization in the modern era. These methods provide an approach that can be replicated by other researchers.

An analysis of research and publications has been carried out in order to provide a theoretical and methodological basis for the following technogenic civilization. Technogenic civilization is a concept that explores the impact of modern technologies on society and human thinking. Several scholars have analyzed the role of technology in human life in their works. Heidegger, in *"The question concerning technology"* (Heidegger, 1977), describes technology as a force that

transforms human existence and examines its essence from a philosophical perspective. He argues that technology is not merely a tool but fundamentally changes the way humans perceive the world. McLuhan, in *"The Gutenberg Galaxy: The making of typographic man"* (McLuhan 2013), emphasizes the influence of print technology and electronic media on culture. He suggests that different forms of communication shape human thought and the structure of society. Postman, in *"Technopoly: The surrender of culture to technology"* (Postman 2006), argues that technology dominates society and alters its values. He highlights that technology not only facilitates life but also shapes human values and culture. Andrew Feenberg (Feenberg, 2002) examines technology within a social and cultural context, emphasizing its role in reshaping societal structures. He argues that technology is not merely a neutral tool but a force that shapes social relations and power dynamics. Albert Camus (Camus, 1942) highlights how technogenic civilization undermines human moral and existential values, condemning individuals to an absurd world. He believed that technological progress led to human alienation from nature and their own essence.

Research results.

Analysis of technogenic civilization and its characteristics. Each newly emerging civilization has developed based on the achievements of previous civilizations and has directly benefited from them. When analysing technogenic civilization through the stages of pre-industrial society, industrial society, and post-industrial (information and knowledge) society, it becomes evident that this type of civilization not only develops further at each new stage but also acquires syncretic and eclectic characteristics. In this sense, we observe that technogenic civilization takes different forms across various stages. The initial stage of technogenic civilization is characterized as a developmental form in which the influence of technology on social, political, and economic spheres remains weak. In the subsequent stage, rapid development occurs due to technological advancements and changes in social structures. During the stage of refinement, complex and multifaceted characteristics emerge, and the penetration of technology into societies intensifies. *"Whether we embrace technology enthusiastically or reject it, we still remain under its influence. We succumb to it in the worst possible way..."* (Heidegger, 1977). In the social-philosophical discourse, during the stages of technogenic civilization, a person struggles to make their life meaningful in the face of uncertainties brought about by technology. This also constitutes a context in which technology creates both risks and opportunities as a path for individuals to discover their own existence.

Technogenic civilization is formed through the synthesis of both physical and intellectual energy, along with the most advanced technological capabilities. The combination of energy sources, human control over them,

and technological achievements shapes technogenic civilization as a self-regulating system. The integration of new technologies into industrial energy production, which is in constant demand, enables more efficient resource utilization. *The availability of energy sources determines the amount of work that can be accomplished, and the management of these energy flows shapes human power and influence over nature* (Odum, 1971, p. 43). However, it also raises the issue of equitable distribution. Unless this problem is resolved, technogenic civilization, in addition to being social, may evolve into a system that promotes an increasingly unequal distribution of resources from technological and ecological perspectives.

As a result, the dominance of global information systems and technologies may intensify, exacerbating social inequalities. *"It is also important to consider that digital inequality is experienced differently across various geographies. In countries like India, where class, income, gender, education, and other inequalities are highly pronounced, the level of inequality is still largely shaped by limited access to technological opportunities"* (Kayış, 2021, p. 114). This dominance may encourage technology giants and information platforms to become the primary centers of power in society. When interacting with nature, humans influence both the natural world and their own existence. From an existentialist perspective, this also interprets the process of "self-discovery" for the individual. The expansion of technological capabilities plays a crucial role in the formation of the middle class, which serves as a fundamental condition for social stability and sustainable development. Another key aspect that distinguishes technogenic civilization from other civilizations is not only the level of technological development but also the degree to which technology is accepted by society, its proper use, and the fundamental transformations it can bring about in social, political, and economic spheres.

Technogenic civilization, to put it briefly, is one in which a wider range of people may access technology. Technogenic civilization has not, however, advanced at the same rate in every culture as technical advancements varied among nations in terms of their degree and real-world applications. In addition to being useful instruments, technologies also contribute to the body of knowledge in society. As a result, technogenic civilization gradually leads humanity to a more controlled situation. *"Knowledge does not expand the areas of determinism; rather, it narrows them. And as a result of the unexplored effects of technology, maximum determinism emerges in human life."* (McLuhan, 2013, p. 380). From an existentialist standpoint, it should be highlighted that although existentialism suggests that people may "choose their own existence," technogenic society restricts these options to predefined parameters and frameworks. Since people must adjust to new technologies, their lives are defined by the way technology dominates society. However, as the body of knowledge has grown, technology has evolved

from a simple means of achieving human objectives to a force that guarantees the advancement of society and permits personal growth. Even while these developments could seem to be the quick "destruction" of traditional civilizations, technological civilization may eventually create a more vibrant culture. As technology advances, culture itself becomes more universal and global, which dialectically fits with people's need for advancement. *"As a nation reaches a high stage of development, it gains the power to change its culture. For instance, in recent years, the Japanese have left behind Far Eastern culture and integrated into Western culture."* (Coşkun, 2012, p. 108). Traditional moral and ethical principles are transformed by technological civilization, creating a new moral code that satisfies the needs of contemporary civilizations. These values, however, do not entirely vanish; rather, they evolve with technology, providing a framework for meeting the evolving demands of society. Tensions emerge during intercultural conflicts between more open-minded strategies trying to keep up with technological improvements and conservative strategies aimed at maintaining the distinctiveness of cultures.

Conversely, technological civilization's universality fosters better cross-cultural communication and understanding. *"...the almost prerequisite for technological development is the existence of a number of values and the formation of these values. Only, in this way, it may be possible to determine the most appropriate way of what, when, and how should be done."* (Ural, 2000, p. 3). From a social-philosophical perspective, a synergetic relationship between technology and culture is formed in this process. The adaptation of culture to technology and the influence of technology on the development of culture mutually foster the emergence of a more complex and global system.

Technogenic civilization is characterized by the expansion of human capacities through technological methods. This element makes sure that technology serves as more than just a tool; rather, it is a powerful force that increases human capacity to influence society and the environment. Automation and artificial intelligence advancements enable technology to function without direct human involvement. In order to fulfill human potential, technology develops certain frameworks and regulations. In addition to influencing human choices and actions, these factors also create new social and economic realities in the administration of technology systems. In contrast, people continue to be important as the administrators of these processes in technogenic society, even though cyber-physical systems and artificial intelligence play a big part in decision-making. Because of this fact, people are less directly involved in technological civilization and are instead more redirected toward indirect control and regulation roles. *"Machines can certainly 'think.' However, their ability to think can only occur in activities defined by humans and related to humans... The boundaries of machines are encompassed*

by humanity's demands and possibilities." (Yılmaz, 2024, p. 68). Technogenic civilization represents a shift toward a more automated, technology-based governance system. In this context, human adaptation to the technogenic reality, i.e., the new world shaped by technology, becomes a primary requirement of technogenic civilization. In this civilization type, humans evolve not only as biological beings but also as technological entities.

The growing role and expanding scope of technology in technogenic civilization tend to undermine traditional moral values. However, since humans constantly need sacred beliefs and moral values, technology itself becomes sanctified, distinguishing it as a phenomenon that introduces new ethical forms. Thus, through the tools it offers to address contemporary problems, technology becomes a guiding principle in the modern world. In this sense, the concept of "God" is no longer associated with spiritual and religious forces but is directly embodied in technology itself. "The exaltation of one god requires the devaluation of another. The command 'Thou shalt have no other gods before me,' which pertains to Jehovah, is equally applicable to the 'technological god' (Postman, 2006, p. 188). Technogenic civilization has gone through stages of contradictions between religion and technology.

However, these contradictions have not negatively impacted the development of civilization, as religion did not entirely reject technological progress. On the contrary, some religious belief systems have supported technological advancement. In fact, religious worldviews, belief systems, and the factor of faith have accelerated technogenic development. Thus, traditional national and spiritual values have also stimulated the growth of the new technological civilization. From a social-philosophical perspective, these contradictions remain as obstacles that determine the development of society. However, these contradictions also shape the speed and direction of development. This dialectical approach allows for a better understanding of the various social, economic, and cultural changes associated with the development of technogenic civilization.

Western and Eastern cultures have interacted to create modern technogenic civilization, which has developed into a model of global civilization that cuts over national and cultural borders. Eastern cultures view technology in this light, with a primary focus on the personal growth of the individual. The West, on the other hand, takes a utilitarian stance toward technology, utilizing it to improve efficiency and societal advancement. Eastern civilizations try to combine their national values with technological advancement. This element also affects how technogenic civilization evolves into a paradigm of universal civilization.

Conclusions.

Technogenic civilization creates a system in which technological means are used to manage human thoughts and behaviors. It is a development model centered around technology and energy that transforms both the biological

and social existence of humans, forming new societal structures. In this civilization, issues like the replication of consciousness functions and the programming of human brain activities in machines take a central role. The rapid exchange of information between humans and machines, the development of management and functional integration, as well as the completion of certain aspects of human activity through technological systems, pave the way for further advancement. Overall, this civilization reinterprets past traditions and combines them with technological possibilities to form new value systems and social structures aimed at the future. In technogenic civilization, freedom is directed toward ensuring the social and individual rights of people. On the other hand, it is limited and distorted by the constraints and control mechanisms created by technological systems. The genetic modification of humans or the implantation of technological devices into their bodies increases the risk of violating human rights and personal freedoms.

Technogenic civilization evolves through the synthesis of human physical and intellectual potential, shaped by the influence of technology on social, political, and economic structures. As this civilization progresses, technology ceases to be merely a tool and instead transforms into a fundamental force that defines the essence of human life and its place in the world. Technogenic civilization takes on different forms at various stages, acquiring eclectic and syncretic characteristics, thereby generating both opportunities and risks in its development.

One of the most significant characteristics of this civilization is that technology induces changes not only in economic and social structures but also in the ontological and epistemological foundations of human existence. Drawing on the perspectives of philosophers such as McLuhan and Heidegger, technology alters the way humans perceive and interpret the world, directing them toward a new mode of being. However, technological advancement simultaneously imposes constraints on human free will by framing individual choices within specific boundaries. In this context, technogenic civilization emerges not only as a system for managing material resources but also as a mechanism for controlling knowledge and information.

Furthermore, technogenic civilization contributes to the globalization of culture and the transformation of ethical values. While technology was previously utilized primarily by developed nations and large corporations, contemporary developments have enabled individuals and small institutions to become active participants in this process. This shift facilitates the universalization of technogenic civilization and fosters new syntheses between the West and the East. On the other hand, the sacralization of technology and its integration with ethical values further deepen the socio-philosophical essence of technogenic civilization. Thus, this civilization redefines the existential condition of humanity, establishing a

new paradigm for the interaction between nature and technology.

Ultimately, technogenic civilization is a complex process that expands human potential and places technology at the center of life, while simultaneously creating social, political, economic, and ecological challenges. This civilization, shaped by the interaction of Eastern and Western cultures, attempts to establish a balance between global solidarity and individual identity. Therefore, technogenic civilization presents itself as a universal model that merges the traditions of the past with the technological possibilities of the future.

The key perspectives for future research are as follows:

1. Social and ethical impacts of technology: The influence of technology on human freedoms and rights, and its potential to exacerbate inequalities.

2. Impact of technology on nature and ecosystems: The effects of technogenic civilization on nature and the environment, as well as the consequences of interference with ecosystems.

3. Intercultural interaction and new values: The relationship between Eastern and Western cultures and how these cultures merge within a technogenic civilization.

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