ZhytomyrIvanFrankoStateUniversity Journal. Philosophical Sciences. Vol. 1 (97)
Вісник Житомирського державного університету імені Івана Франка. Філософські науки. Вип. 1 (97)
ISSN: 2663-7650

UDC 130.2:165.62:17:004](091)(100)"16/18"
DOI 10.35433/PhilosophicalSciences.1(97).2025.79-86

MECHANISTIC ONTOLOGY OF THE MODERN PHILOSOPHY (XVI-XVIII) AS A PHILOSOPHICAL BASIS FOR MODERN CONCEPTS OF TECHNOLOGICAL IMMORTALITY OF MAN

I. K. Vitiuk*

The article is devoted to the philosophical analysis of the evolution of the idea of human immortality – from mythological and religious ideas to modern technological concepts. The focus is on the transition from the religious model of the God-man as the guarantor of immortality to the rationalistic mechanistic idea of man as a "machine" in the modern era (Descartes, Lametri, Hobbes). The author traces how these ideas have influenced modern transhumanist ideas that propose to overcome mortality through the use of technology – genetic engineering, cryonics, artificial intelligence, nanotechnology. Examples of modern research and technologies that demonstrate the human desire to transcend one's own nature are considered: digital immortality, cyborgization, beautification, transplantation. Particular attention is paid to the ethical challenges that humanity faces in the context of biotechnological intervention in human ontology. The purpose of the article is to identify the philosophical prerequisites for the formation of the idea of technological immortality as a modern strategy for overcoming the limitations of human nature without the participation of God. The analysis reveals a shift in focus from spiritual improvement to technical modification as a new path to immortality. As a result of the conducted analysis, it is concluded that the contemporary paradigm of immortality is increasingly distancing itself from its spiritual and religious foundations, acquiring the characteristics of a secularized project of technogenic evolution. Technological immortality emerges not merely as a desire to overcome physical death, but as a new anthropological matrix that redefines the very essence of the human being-its value, boundaries, and purpose. This shift entails a radical transformation in conceptions of the body, consciousness, and identity, thereby foregrounding critical questions concerning moral responsibility, the limits of permissible bioengineering interventions, and the preservation of humanistic principles in a post-human future.

Keywords: *mechanistic ontology of man, death and immortality, man as a mechanism, transhumanism, genetic engineering, digital immortality.*

МЕХАНІСТИЧНА ОНТОЛОГІЯ НОВОГО ЧАСУ (XVI-XVIII СТ.) ЯК ФІЛОСОФСЬКЕ ПІДҐРУНТЯ СУЧАСНИХ КОНЦЕПЦІЙ ТЕХНОЛОГІЧНОГО БЕЗСМЕРТЯ ЛЮДИНИ

І. К. Вітюк

Стаття присвячена філософському аналізу еволюції ідеї безсмертя людини – від міфологічних та релігійних уявлень до сучасних технологічних концепцій. У центрі уваги – перехід від релігійної моделі боголюдини як гаранта безсмертя до раціоналістичного механістичного уявлення про людину як "машину" в епоху Нового часу (Декарт, Ламетрі, Гоббс). Автор простежує, як ці уявлення

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вплинули на сучасні трансгуманістичні ідеї, які пропонують подолати смертність через використання технологій – генну інженерію, кріоніку, штучний інтелект, нанотехнології. Розглядаються приклади сучасних досліджень та технологій, що демонструють прагнення людини трансцендентувати власну природу: цифрове безсмертя, кіборгізація, бютифікація, трансплантація. Особлива увага приділяється етичним викликам, які постають перед людством в умовах біотехнологічного втручання в онтологію людини. Метою статті є виявлення філософських передумов формування ідеї технологічного безсмертя як сучасної стратегії подолання обмежень людської природи без участі Бога. Аналіз розкриває зміщення фокусу з духовного вдосконалення до технічної модифікації як нового шляху до безсмертя. У результаті проведеного аналізу зроблено висновок, що сучасна парадигма безсмертя дедалі більше віддаляється від духовно-релігійного контексту і набуває характеру секуляризованого проекту техногенної еволюції. Технологічне безсмертя постає не лише як прагнення подолати фізичну смерть, а як нова антропологічна матриця, що переосмислює саму суть людини, її цінність, межі та призначення. Відбувається радикальна трансформація уявлень про тіло, свідомість й ідентичність людини, що актуалізує питання відповідальності, меж допустимого біоінженерного втручання та збереження гуманістичних засад у постлюдській перспективі.

Ключові слова: *механістична онтологія людини, смерть і безсмертя, людина як механізм, трансгуманізм, генна інженерія, цифрове безсмертя.*

Formulation of the problem. Man has always strived for immortality, and this desire was formed in pre-philosophical times within the framework of mythological consciousness. Religion conceptualizes the idea of immortality by forming the image of the God-man, who combines two natures – human and divine, mortal and eternal. Man explained the idea of death by the imperfection of human nature, which is created, secondary, and temporary. It has to be opposed by another, perfect, and therefore eternal nature. In religion, the God-man appears as a guarantor of the possibility for man to achieve the divine state of immortality. Thus, the task of religion is to bring man closer to the deity in order to make the idea of his immortality possible.

The philosophical tradition that emerged in ancient times explains the emergence and disappearance of all things in the world, along with the eternal existence of the world as such, by the presence of the world's first principle, or substance. No matter how it was imagined, only one thing remained unchanged: the eternity and indisputability of its existence. Substance as a carrier of the idea of immortality would later extend to the understanding of human nature. The first principle from which everything arises is the bearer of eternity and, therefore, perfection

Objective idealism, conceptualized by Plato, forms the idea of the carrier of the idea of perfection in man - his immaterial double, the soul. Although the idea of the soul existed before Plato, it was he who developed the concept of metempsychosis as a mechanism for improving human nature through the acquisition of knowledge and its implementation in personal experience during the previous incarnation of the soul, for which it received a just reward in the form of the next incarnation with the corresponding previously deserved fate. Thus, metempsychosis linked the idea of immortality with the idea of perfection. The embodiment of the idea of perfection is the deity/God, whose first attribute is eternal existence beyond the space-time continuum.

The medieval European Christian philosophical tradition focuses on the methodology of improving human nature, bringing man closer to God so that the immortal human soul, freed from the body, can dwell with God in eternity.

The modern era, which began with scientific revolutions, transforms the picture of the world under the influence of a mechanistic worldview. God the Creator appears as a brilliant architect, the prime mover, and the world is a giant well-coordinated mechanism. Man also receives the status of a "mechanism" controlled by the soul.

The views of modern philosophers on human nature are analyzed today by a number of researchers, including D. Garber, D. Brown, Tad M. Schmaltz, L. Alanen, M. Dauler Wilson, J. Cottingham, and the mechanistic approach to human nature as the basis for projects of its improvement is studied in the views of such researchers as J. Huxley, F. Bostrom, and others. Huxley, N. Bostrom, F. Fukuyama, M. Chan, P. Dominqos, C. Sofka, I. Kobzieva, N. Kobyzhcha, etc.

Religious ideas about immortality reached their apogee in the image of the God-man, who combines imperfect human nature with perfect divine nature. The latter is the guarantor of man's achievement of immortality. Modern technologies give a person a reason to interpret immortality as hypothetically possible, and death as only a flaw in human nature that can be hypothetically eliminated.

The purpose of the article is to analyze the philosophical prerequisites for the formation of the concepts of technological immortality of our time, starting from the mechanistic concept of understanding man in the modern era.

Discussion and results. The foundations of the mechanistic understanding of man are formed along with the mechanistic picture of the world in the historical era of modern times. First of all, it is worth mentioning René Descartes, who in his "Treatise of Man" sets forth his own original interpretation of human nature for his time, based on a dualistic picture of the world. On the one hand, he fully adheres to the medieval philosophical Christian tradition of human nature – a person consists of a body and a soul, but Descartes approaches the human body as a perfect mechanism created by God so that it can perform all the physiological functions provided for it by the "animal spirits" that carry blood from the heart to all other parts of the human body. He understands the soul exclusively as a rational capacity, or thinking substance [1].

The image of the human-machine takes on a holistic form in the work of J.-O. Lametrie. In his work "Man a Machine" [2], he emphasizes the extreme complexity and self-sufficiency of the human body (mechanism) to independently acquire movement and maintain a "working state", and he considered the soul to be only a mental ability of a person, the result of the activity of the body itself.

Although Hobbes does not delve into the anatomical details of the human body to compare it with man-made mechanisms, he considers the body as matter in motion, which, like other material bodies, acts (action means both the movement of a body part and breathing or thinking) through the physical movements of material particles [3]. The mechanistic worldview of the modern era leaves an imprint on Hobbes' understanding of the nature of the state and society. He calls the state an "artificial man" with an "artificial soul"; this "artificial man" has a "head" – a monarch or government, "organs" – laws, courts, executive power, "body parts" – individual people who perform their functions. Consequently, within the mechanistic understanding of society, a person is only a "part", a "screw" that must perform its functions [4]. And since a human being, like any other body, is set in motion by the action of universal laws of motion and cause-and-effect relationships, within the state, as part of it, he or she is reduced to his or her function, i.e., a "screw" in the mechanism.

Subsequently, the image of the human-machine became a part of the broader philosophical and cultural discourse, became a part of mass culture, and opened up space for hypothetical solutions to human ontological problems. Thus, the image of the human machine, a kind of terminator that combines human qualities with the technical advantages of the machine: strength, endurance, and insensitivity to pain, became a peculiar combination of human nature and the mechanical achievements of civilizations. These advantages make it possible to defend humanity when other options seem ineffective [5].

In reality, with the invention of the exoskeleton in the 1960s and the emergence of bionic prostheses, the image of the

human-machine ceased to be hypothetical and virtual. Today, among the options for overcoming the problem of human mortality, one of the solutions is multiversion projects to improve human nature with the help of technology, which involves the involvement of a technical component

We would like to focus on the influence of the mechanistic approach to human ontology on the formation of modern concepts of technological immortality. These include, in particular, transhumanism. The term "transhumanism" was introduced by Julian Huxley in 1957. He raises the question of man's conscious direction of his evolution with the help of knowledge and technology, considering modern man not the pinnacle of evolution, but only its beginning. Man has hidden capabilities, can overcome the limitations of his nature through technology [6]. Transhumanism is a philosophical and scientific movement that advocates the use of current and future technologies to enhance human capabilities and improve the human condition [7]. The concept involves the use of technologies such as genetic engineering, cryonics, artificial intelligence, and nanotechnology. The ultimate goal of modifying human nature is to overcome its limitations by the aging process and the mortality factor, and thus to achieve immortality.

Therefore, the concept can be considered a strategy for overcoming the human in order to transcend the human by technological means, and attain a state of immortality without the participation of God.

In his article "Transhumanist Values", Swedish philosopher, professor at Oxford University and director of the Institute for the Future of Humanity, Nick Bostrom emphasizes humanity's responsibility for the use of technology and the ethical challenges of transhumanism. He outlines a number of transhumanist values, including self-improvement, scientific approach, freedom of choice, and an optimistic view of the future [8].

Modernity offers a wide range of technologies for improving the human body, which can be divided into the following categories: beautification, cyborgization, modification and transplantation [9]. Beautification is largely driven by the influence of modern media culture with its cultivation of youth and the standards that a person must meet. And although the achievements of modern plastic and aesthetic surgery, as well as other methods of improving a person's appearance, have reached a high technological level, the result will mostly be "superficial" in the sense that it does not affect human nature. Cyborgization is driven by the need to replace body parts with their technological counterparts in order to restore the body's functionality. For example, even artificial teeth, hearing aids, and pacemakers can be considered cyborgization tools, not to mention bionic prostheses. Modification of the human body can be manifested in piercings, tattoos, scarification, deformities of various parts of the body (earlobes, lips, tongue) and, like voter registration, has a social nature. Transplantation is the closest to the goal of improving human nature, as it is performed only when absolutely necessary to replace a non-functional organ with its donor counterpart and thus prolong a person's life. Most ethical issues are related to transplantation. And it is transplantation that most fully demonstrates the tendency to overcome death or at least postpone it.

The most radical way to achieve the goals of transhumanism is cryonics, the cryopreservation of the body of a person who has just died in order to restore it in the future, when the level of medicine and technology will be sufficient for their further treatment and life. Technically, for this purpose, blood is drained from the body and stored separately (to prevent "spoilage").

Genetic engineering became possible after the discovery of the DNA double helix in 1953. The beginning of genetic engineering was the creation of the first recombinant DNA by Paul Berg, and in 2020, the Nobel Prize in Chemistry was awarded to Emmanuelle Charpentier and Jennifer Doudney for the discovery, metaphorically called "genetic scissors", which allows editing the genome in record time - a few weeks [10]. The technology opens up revolutionary prospects for improving human life, but it also raises numerous bioethical issues and is

potentially dangerous, so it requires a comprehensive interdisciplinary approach to research and regulation of legal aspects, focusing on the value of human life and respect for the right to human dignity.

Futurist Raymond Kurzweil is a promoter of "digital immortality", predicting that by 2030 AI technologies will have developed enough to merge man and machine to the point where consciousness ("immortal soul") can be "uploaded to the cloud" [11], and in 2045, this merger will allow people to turn into superhumans [12].

Another way to extend life expectancy and the hypothetical possibility of achieving immortality is to use nanotechnology [13]. Although the use of nanotechnology in medicine is undoubtedly a revolutionary technology, human immortality is seen in this regard only as a speculative consequence of the elimination of diseases [14]. In addition, there are many ethical and legal challenges, such as social inequality and access to technology, which will eventually lead to access to immortality for only a select few.

One of the new directions in the interdisciplinary field of research is digital death studies, which is gaining more and more importance in the context of digital reality [15]. From the realities of the digital society with its convergence of humans and digital technologies, when even in everyday life "the body and digital technologies are seen as phenomena of the same order", when interaction with digital technologies "the body goes beyond the traditional vision" [15].

Thus, virtual reality makes possible the existence of a digital copy of a person, an avatar, an edited selfie, which often does not coincide with a real person, as they are subjected to the process of editing in order to improve, to get closer to the "ideal" body. In the space of digital embodiment, the body acquires the features of an "augmented reality body" when the biological is inextricably linked to the digital. Thus, the human body as an information construct can be subject to manipulation and external control [16].

Researchers argue that there is a possibility of the emergence of a digital twin, a "digital self" of a person, based on Big Data – the amount of information that a person has provided to the digital world. Thus, in 2015, P. Dominqos, a professor of computer science at the University of Washington, wrote that a Master Algorithm that can learn anything could create a model of a human Digital twin [17].

However, even now, the problem of death and immortality is being comprehended in real and virtual dimensions, when a person dies, they still leave a digital trace behind, not existing physically, they continue to exist in digital reality, the "digital self" exists in the Internet reality. This applies to digital accounts of social media users, for example, which can be transformed into a space for grieving and remembrance.

Carla J. Sofka, associate professor of social work at Sienna College, together with her co-authors, for the first time raises the topic of death, execution and grief in the online universe; introduces the concept of "thanatotechnology", which she proposes to understand as the use of digital technologies in social practices of perceiving and experiencing the loss of loved ones [18].

The main problem that transhumanism poses as a philosophy of modern improvement of human nature by technological means is social. The use of technologies that should be used exclusively for the benefit of society is an unprecedented challenge. The main goal of achieving immortality puts transhumanism on a par with such a social and spiritual phenomenon as religion, and the human carrier of technology receives some divine power. Mortality as an attributive feature of a human being is questioned, considered only a "limitation of human nature" [19].

One of the critics of the idea of human immortality is Fukuyama, who sees it, among other dangerous aspects, as a threat to democracy [20]. From this perspective, the problem of technological immortality concerns not only human existence, but also social existence.

Conclusions. Human existence poses many challenges, among which the challenge of one's own mortality is one of the most significant. The idea of immortality was formed in pre-philosophical times within religious consciousness, finding a more thorough understanding in philosophical and scientific concepts. Philosophy has been comprehending human nature and its place in the world since the very beginning of philosophical thinking. The modern era offers a mechanistic understanding of human nature that is consistent with the general metaphysical and scientific picture of the world of that time. The tradition of a mechanistic understanding of man, initiated by Descartes, Hobbes, and Lametri, forms an image of man outside the religious tradition and lays the groundwork for further understanding of the possibility of technological transformations of human nature.

The current state of technological development gives grounds to assert that it is possible to overcome the flaws of human nature, such as illness and (possibly as a consequence) even death. This is reflected in the philosophy of a new type of immortality - "technological" immortality, one of the varieties of which is "digital" immortality. And this approach to human ontology poses new challenges to humanity, such as ethical aspects, the problem of freedom of choice, social justice, human dignity, etc., which should form the philosophical basis for the use of such technologies.

Modern concepts of human immortality have historically been derived from religious and philosophical understandings of human nature, in particular the mechanistic worldview of the modern era, which was also an integral construct between scientific achievements, metaphysical ontology of man, and religious worldview. And today, the ideas of transhumanism in one form or another require the same interdisciplinary analysis of their ontological, moral, and social implications.

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Receive: March 20, 2025
Accepted: April 25, 2025