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Toward a Transhumanist Transformation of Human Labor Potential in the Context of Global Challenges

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Abstract: Modern development of social relations against the background of the latest achievements demonstrates the need for rethinking the effectiveness of disclosure of labor potential. Therefore, the purpose of the article is to analyze the problems of transhumanistic transformation of human labor potential in the context of globalization challenges of modernity. General scientific and special scientific methods of research have been used in the work, the principles of objectivity, scientificity, concretization, and systematicity have been observed. Search systems revealed more than 60 articles on the problem of transhumanism. As a result of the selection and verification process, only 20 of the most up-to-date sources from 2013-2021 were selected. related to transhumanist transformations of social, legal, and labor aspects. The results considered the problem of the formation of transhumanism and its development and prospects for further use. It is noted that the global goal of this direction is the hybridization of humans and mechanisms, which will allow a new appreciation of production and labor possibilities. In conclusion, it is noted that transhumanism can become an alternative to the dominant mercantilism, as it draws attention to the human problem. The key ideas of transhumanism, supported by a legislative fixation, can improve the notion of the need to transform human nature, psychological and physical condition in order to increase social capital and, consequently, the labor potential of humanity. At the same time, its implementation may lead to an increase in the negative manifestations of mercantilism.

Keywords: transhumanism, labor potential, mercantilism, social transformation

Introduction

Today's information society faces open challenges with hidden opportunities and risks in further evolution. We are talking about the penetration of digital technologies in all spheres of life, the robotization of production processes, medicine, the development of biotechnology and genetic engineering, which are already able to make certain improvements in the human genome at the modern level. Thanks to these and many other processes, lawyers and economists wonder about the future of humanity, the main trends of economic development, and the integration of biotechnology to improve the productive forces, in particular human ones. For this reason, the concepts of transhumanism have interested not only philosophers, but also representatives of other sciences, entrepreneurs, and managers, because scientific and technological progress opens up opportunities not only to improve the means of production but also the workers themselves (although such concepts are still perceived as utopian).

The continuation of globalization processes and the permanent growth of interconnections and interactions between peoples, their social and cultural worlds, states, and political systems offer new opportunities for cooperation (Cruz, 2021). There is now a belief that the intrinsic elements of peoples' or states' advantages in economic development (and corresponding planetary rankings) are not so much the quantity of human potential as its quality. The phrase “human potential” is not new in economic science and is used from the introduction by Gary Becker and Theodore Schultz from the 1960s to interpret the quality of any constituent elements of social space in the planetary dimension. From the beginning of its use in the scientific literature, the concept of “human potential” denoted primarily exclusively parts of the economic situation of individuals or families, regions, countries, i.e. defined the proportion of working-age people with the necessary qualifications trained respectively, the condition and characteristics of the working activity of individuals, the degree of quality of managerial decisions (level of managerial skills), efficiency and rationality of functioning of working-age people, prospects for further development of the labor market Later this concept began to cover also the level of health of the population and medical opportunities in the West, education and intellectual development of the working population, the formation of such working conditions, which would take into account the latest technological knowledge and capabilities, experience of workers in solving intellectual problems. At present the lexeme “human potential” can cover quite a wide set of characteristics that should accompany human life in modern developed countries.

Scientific comprehension of the theory of transhumanism began at the end of the 20th century, but only in the middle of the 21st century it received a wide detailed substantiation. However, there are still many debatable aspects and implementation of transhumanism concepts in legal, social, educational, and other spheres. For example, More & Vita-More (2013) highlighted key aspects of the formation of transhumanist theory through the prism of analysis of contemporary technological changes. According to More & Vita-More (2013), the rapid pace of technological development plays an important role in overcoming basic human limitations. In addition, their work contains major works by leading thinkers on the debatable possibilities of the posthuman condition; the authors analyze key philosophical arguments for and against human perfection, identify the inevitability of the continuation of life, and explore solutions to pressing social problems. Marchenko & Kretov (2019) identified the basic foundations, forms, and content of the relationship between the principles of information philosophy and transhumanism through the lens of philosophical anthropology. The researchers focused on the status of the subject of cognition and transformations of the forms of its activity within this correlation. Lipowicz (2018) notes that the concept of transhumanism influences the use of modern technology and genetics to overcome the physical and some psychological limitations of the human species. Giesen (2020) has studied transhumanism from the perspective of political science. This shows that it can also be analyzed as a genuine political theory aimed at shaping the concept of the “new man”. The characteristic of transhumanist thought determines that it justifies the next commercialization of human life, as the fourth industrial revolution promotes the emergence of mass implementation of the convergence of technologies. Guerreiro et al. (2021) describe a stakeholder welfare system through the lens of transhumanism and innovative technology. Cruz (2021) has highlighted the concept of transhumanism through a historiosophic lens. However, many aspects of this theory are unexplored and

require further processing and analysis. In particular, the problem of developing human labor potential based on the total implementation of transhumanist principles remains understudied. At the same time, because of the dynamic possibilities of technological development, the forecasts of human potential improvement using the achievements of transhumanism as a philosophical trend are not exhausted and remain relevant for further research.

Research Problem

Among the many challenges that modern social development generates, there are many potential opportunities to use transhumanist ideas to improve the workforce. Strengthening requires consideration of the possibilities of artificial intelligence against the background of the use of bots and mobile applications, analysis of the possibilities of cybernetization of production processes, etc. The penetration of technology and scientific innovations into life is an extremely relevant topic for research and requires theoretical justification and comprehension.

Research Focus

The research focuses on the problems of the possible further transformation of human potential and the impact of these processes on the development of the economy in a globalized dimension. It is primarily about the possibilities of using transhumanism and its ideas in the future to regulate labor relations and quality work. Since contemporary philosophy is becoming much more practical, there is a need not only to support and develop the scientific search and debate but also in general to gradually formulate a renewed understanding of the human potential in the current short-term into a long-term theme of "transhuman" potential. This transition is relevant because further transformation in human consciousness through the emergence and development of artificial Intelligence, neural networks, the emergence of cyborgs or androids in society, their socialization, the potential escape outside the solar system, the ultimate globalization of humanity and the economy, etc., will require additional interpretation.

Research Aim and Research Questions

The purpose of this article is to analyze the problems of transhumanist transformation of human labor potential in the context of the globalization challenges of our time.

Research Methodology

General Background

This research belongs to the type of theoretical and fundamental work because it involves the introduction of a new theoretical explanation and its own interpretation of previous research. This led to the use of appropriate research methods and tools. General scientific and specifically scientific research methods were used in the work, the principles of objectivity, scientificity, and systematicity were observed.

Instrument and Procedures

Using analysis and synthesis, it was first possible to divide the main subject of research (theory of transhumanism) into smaller parts (characterization of basic principles of transhumanism, coverage of human labor potential development based on transhumanism, analysis of the concept of posthuman-machine interaction, etc.). By means of synthesis, these parts are combined and own hypotheses about the further development of posthuman physical and labor characteristics are formed. As a result of using the systematic method, the concept of transhumanism is seen as a variable system, which is constantly in the prism of development and improvement.

Of notable importance was the application of the historical method of research, according to which the evolution of transhumanism is traced, highlighting the basis of the formation stage of this movement. At the same time, the work is built on the principles of philosophical knowledge: dialectical, metaphysical,

and others. In particular, the dialectical principle was used to illuminate the idea of universal dogmas and laws of human and nature development, their interconnection, and improvement. The use of the metaphysical method helped to reveal the inner attributes of social processes in the concept of the relationship between the posthuman and the machine. The axiological method of research also became especially important, because moral and moral factors influencing the development of transhumanist doctrine should be taken into account.

The procedure of the realization of the research goal was carried out in several stages (See **Table 1**).

Table 1

The main steps of the research procedure

First stage	Coverage of the relevance of the research, content analysis of the scientific literature
Second step	Theoretical justification of the concept of transhumanism, coverage of the philosophical foundations of the movement, explanation of basic concepts.
Third step	Identification of peculiarities of modern paradigms of economic life and disclosure of labor potential
Fourth step	Identification of difficulties and opportunities of transhumanism in the disclosure of individuals' labor potential
Fifth step	Summarizing the results of the study

Authors' development

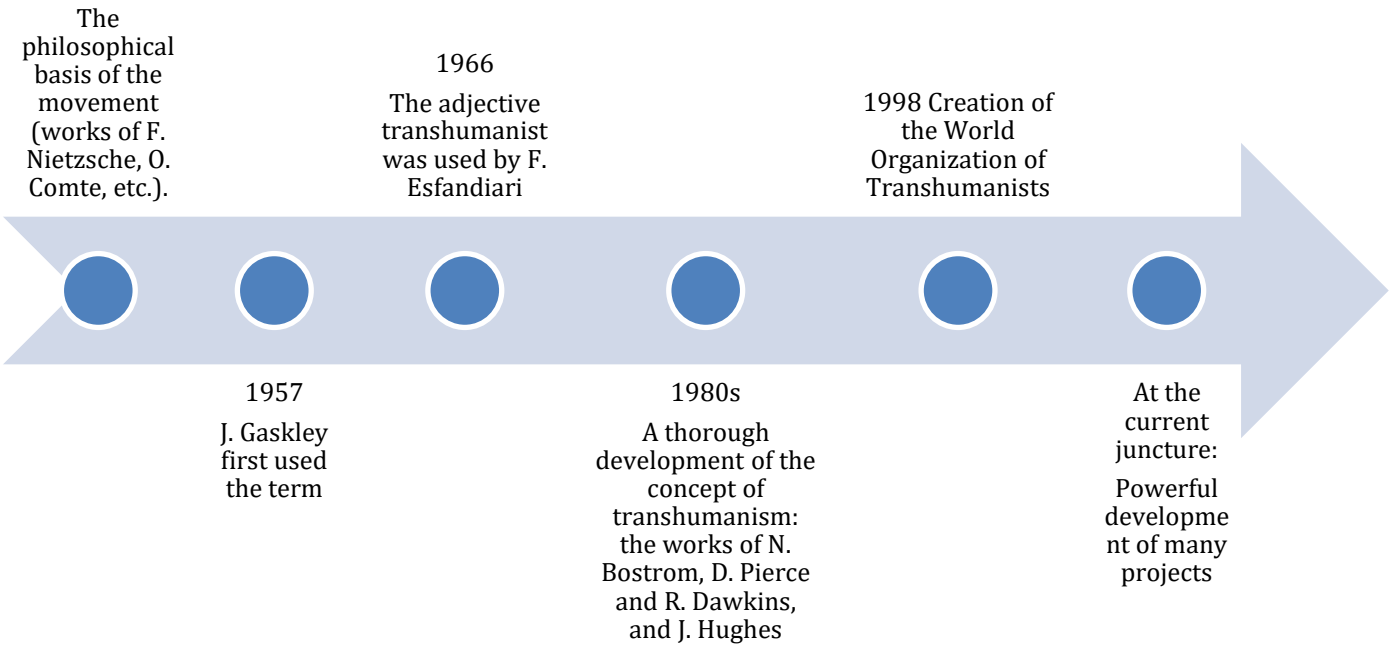
Research Results

Transhumanism as a movement: ideas and implementation

Transhumanist theory is about transcending the natural human condition with innovative technological solutions. The concept has evolved since it first appeared in the 1980s, but the adjective "transhumanist" was used in 1966 by the futurist F. Esfandiari. In addition, some aspects of transhumanism are contained in the social works of Abraham Maslow and Robert Ettinger. Later the transhumanist concept attracted the attention of many philosophers: Nick Bostrom, David Pearce, and Richard Dawkins, James Hughes (Giesen, 2020). In the 1980s and 1990s, the Journal of Transhumanism was founded, and several national and international associations were formed, including the World Association of Transhumanists (See **Figure 1**).

Figure 1

A Model for the Evolution of Transhumanism

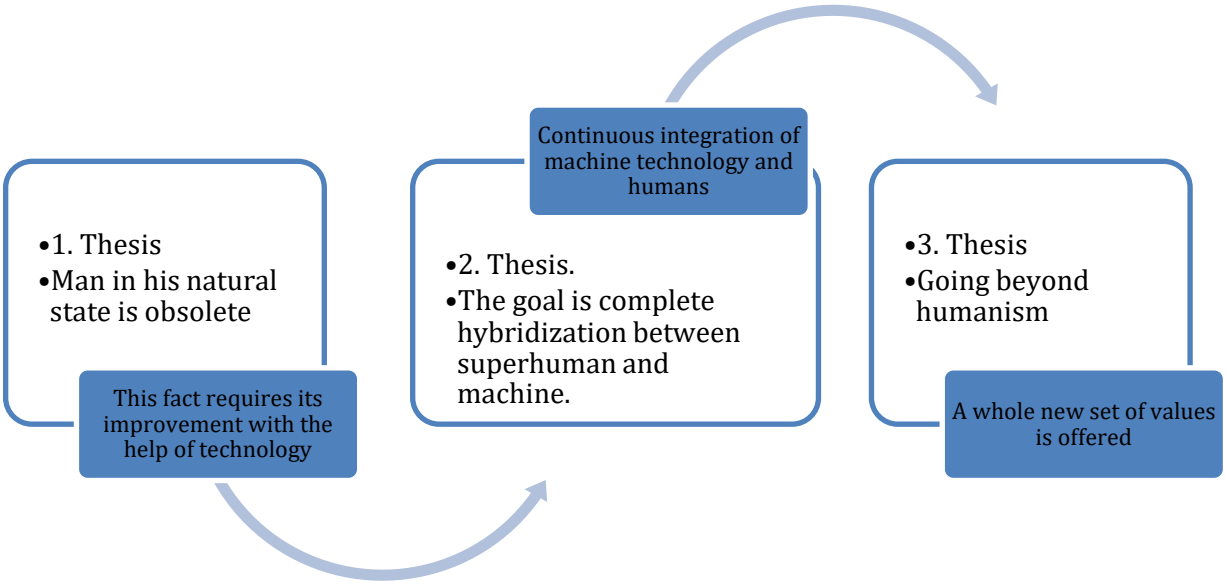


Authors' development

Adherents of this movement note that humanity must transcend the human condition by "working" toward a genetically and neurologically modified posthuman being fully integrated with machines. There are three main theses in transhumanism, which contemporary researchers are increasingly developing and refining (See **Figure 2**).

Figure 2

The main thesis of transhumanism concerning the improvement of the physical and labor potential of human beings



Authors' development

Consequently, the goal of transhumanism is a gradual hybridization between the superhuman and the machine that goes beyond the human-machine concept that exists today (the interaction between

humans and cell phones is a prime example). Technology explained as new agents of hominization will paradoxically become key mechanisms of dehumanization. For this reason, humanity must transcend not only humanity but also humanism. While humanists convince us that humans can achieve development through education and culture, transhumanists propose an entirely new system of values integrated into new technological components (Cruz, 2021). In 2017, researchers from the United States implemented CRISPR-Cas9-based human genome modifications to eradicate inherited heart disease. This serves as an example of a bona fide form of reproductive genetic improvement. Another example is the Cyborg Project, led by British scientist C. Warwick. In 1998, he inserted electrodes into his arm that were connected to his nervous system. Subsequently, they were connected to the Internet, with the help of which the scientist was able to remotely control a variety of robotics, being at that time in different places in the country. In an interview in 2000, this researcher remarked, "Those who have become cyborgs will be one step ahead of humans. cyborgs will look down on humans, who have yet to 'evolve'" (Giesen, 2020, p. 12). The Swedish firm BioHax and the U.S. organization Three Square Market offer employees free implantation of microchips that will automatically type passwords to gadgets, unlock office doors, store personal data, etc.

Transhumanism and mercantilism as important elements of the labor relations of the post-industrial economy

Modern analysis of the legislation of Western Europe and the U.S., where governments are generally liberal and encourage rapid economic progress, provide businesses with tangible preferences in the organization of labor, allowing the use of labor in a neoliberal direction. The main objective of this is the widest and most active promotion of rapid and maximum profits as a result of the activities carried out. For example, the changes in labor law carried out by French officials throughout 2015-2017 prove that labor law is increasingly being rethought in light of the current market realities of doing business (Basse, 2020). As a consequence, the formation of labor relations is integrated into the public discourse not as a result of the labor movement, but as the right of the labor market, in which social connotations and guarantees recede into the background, giving way to the need to build up capital. In addition, business representatives interested in the development of their own companies are great adherents of the former model of labor relations formed during the dominance of factory production in the mid-and second half of the 20th century (Frensch et al., 2021). According to these requirements, the entire potential of workers should be aimed at achieving the maximum working result while maintaining the lowest possible costs in the provision of labor rights and other needs of workers.

The paradox of this development lies in the fact that public authorities, emphasizing their rulings on the rights and interests of business structures, seek to create an attractive climate for investment in national economies (Vandenberg, 2019). But there is a gradual rejection of the humanistic idea of the human being as the highest value. Such initiatives lead or will lead to the emergence of numerous risks for doing business because they can lead to a reduction in the efficiency of the use of labor resources. Society thus suffers a tangible blow in the form of economic crises and the formation of additional criminalization challenges (the emergence of a layer of poor workers who are aggressive and malleable).

For this reason, labor relations, the position of workers, and human capital in the post-industrial era, in general, can gradually degrade under the pressure of the desire to get quick and maximum benefits from the use of labor, intellectual, creative resources of workers while maintaining the lowest costs of their legitimate accompaniment. Such possible consequences can be explained by the dominance of mercantilist ideas in society, the essence of which is reduced to the formation of such priorities and strategic guidelines in public management and social process management as efficiency and payback, with a reduction of social support for human capital development, as far as possible to preserve.

Under such conditions, the ideas of transhumanism, supported by a legislative fixation, can act as a healthy alternative to mercantilism, to introduce and improve the idea of the need to change human nature, psychological and physical state in order to increase its social capital, and, consequently, its labor potential. Transhumanism as a concept is able to draw attention specifically to human beings,

emphasizing their specific characteristics, the possibilities of eliminating shortcomings not so much through self-improvement as through the possibilities of technological progress.

First of all, the practical use of the biotransformational possibilities of modern technology can lead to the de-disability of persons with disabilities, overcoming physiological limitations (Lipowicz, 2018). Due to disability and the active use of such in economic processes, which will lead to an increase in their labor potential.

Transhumanism will also lead to overcoming the discrediting of persons based on gender (More & Vita-More, 2013). If appropriate legal solutions are put in place that will relatively facilitate such a transformation, many men will benefit from women's rights (maternity leave, additional parental leave, etc.), the provision of certain guarantees of night work rights, load limit requirements, etc. In the same way, women will be able to get rid of their former rights with a change in gender and move completely to "male" work. On the one hand, such transformations will make it possible to unlock the labor potential of individuals (who wish to change their gender, as the transhumanists emphasize). At the same time, this example already shows problems with the reform of the legal framework, some of whose concepts become obsolete when transhumanist ideas are introduced (Marchenko & Kretov, 2019).

The model of transhumanism will allow to overcome fundamental human limitations, disadvantages, and problems. Which will significantly increase the labor potential of individuals. Thanks to this, such modified individuals will gain a significant competitive advantage in the labor market, and employers will be able to reduce their risks when hiring such people. It should be noted that transhumanism will also influence further scientific development since the formation of biotransformed persons, artificial intelligence, etc. will require conceptualization, development of a certain status, etc. (McMillan, 2021). Obviously, the framework of "normality," morality and ethics, norms of behavior, etc. will be different. Such freedom will allow the formation of expanded canons of understanding of human nature, to reveal the working, creative potential of the individual on a new level with renewed ideals of freedom, market freedom, etc.

Although such constructions look fantastic, certain ideas of transhumanism are being put into practice in some countries. For example, transhumanists insist on the human right to euthanasia, a right granted in some European countries (Kedar & Hon, 2020). Transhumanist ideas are ready to challenge dominant assumptions, in particular, to propose new standards for unlocking labor potential.

Especially productive is the idea of transhumanists to return to the human being as the highest value. Yes, Armenia's experience as a social and cultural system points to the need to update the strategy of state existence. Probably. It is fair to note the desire of the country's leaders to use advanced scientific concepts of possible ways of working and transforming society, to form theoretical aspects of understanding universal regularities and possible scenarios of social development. In Armenian society, the rules of the pre-modern, modern, and post-modern times of social development operate simultaneously. Because of this, there is a gradual transition to a state in which the use of transhumanist ideas will not be impossible. Therefore, the problem of the quality of human capital and the renewal of its functioning in the near future will require additional study. By potential, we can also mean the possible course of development of the social system, where the human resource is the only active capital that cooperates with all other directions. For this reason, above all, it is important to invest in human capital, because any investment outside of it will look ineffective.

Discussion

One must agree with the understanding of transhumanism as an ideational system, the analysis of which leads to a rethinking of the legal contours of the future, the availability of rights and freedoms, the interests of post-industrial man, and, of course, the unlocking of the labor potential of "people of the new society" (Guerreiro et al., 2021). Although transhumanism is a kind of humanist worldview, it also combines elements of modern constructs, according to which the growth of people's standard of living depends primarily on the human being himself and the realization of his needs and rights. Transhumanism may become an alternative to the formation of a modern worldview. Although researchers rightly draw attention to the focus on ordinary individuals, it is nevertheless worth noting

the problematic elements of the use of transhumanism for the problems of improving human potential in general.

First and foremost is the clash of transhumanist paradigms with ethical concerns (Tatarian et al., 2018). At the same time, the appeal to transhumanism has many ethical problems, since the necessary transformations in the use of labor potential have a direct bearing on the difficulties in interpreting certain concepts and phenomena, including in the legal plane (Uğur & Kurubacak, 2019). We are talking about the emergence of difficult situations that can have destructive consequences. In particular, this will have a direct bearing on the formation of a post-industrial labor market: the most in-demand may not be highly qualified specialists who have developed their knowledge, skills, and abilities, acquired the necessary experience and competencies, but individuals with better and more expensive "modifications". Adherents of transhumanism consider such reproaches categorical, appealing even to the simple example of the cell phone: once it was a sign of a wealthy person, but over time technology became available to the general population, and today smartphones are used by almost everyone (Lerner et al., 2021). At the same time, such explanations do not seem convincing. Even abstracting from the existence of smartphones of different price categories (with different capabilities), improving the human body is a priori not cheap and dangerous. For the disclosure of labor potential, the subjectivity of the individual will also remain difficult, because, with the dominance of transhumanist paradigms, it will be not so much the individual himself as an axiological quantity that will come to the forefront, but the ways in which this individual can be biotechnologically improved - the extent to which he can become the most effective tool for industrial relations in the most primitive detection. In fact, transhumanism may echo the tenets of mercantocentrism.

Separately, the problems of discrimination should be noted. When workers are improved by biotechnical means, their ability to work will increase, so they will have greater opportunities for wages and benefits because they will do their jobs better. Growing the workforce in this way will marginalize all those who cannot improve their abilities through medical or technological advances (Miceli, & Mungan, 2021). From this perspective, there will be a persistent perception that all those who are unable to pay for expensive surgeries will receive fewer job opportunities, so fewer chances to realize their labor potential. And even when placed in a position, career opportunities may be limited in a technological way. This could have the opposite side of the coin - a social movement against those who dare to bio-exploit themselves.

Separately, researchers note the dangers of using artificial intelligence (Garoupa & Grajzl, 2020). One must agree with such reservations since its use is not codified by legislative acts and may lead to negative consequences in the future. Under such circumstances, the use of capabilities must be under strict control, the use of artificial intelligence resources in labor aspects will have only a limited view and generally have little impact on the unlocking of workers' labor potential.

Conclusions and Implications

So, the possibilities of transhumanism as a philosophical movement that aims to integrate the most advanced technological solutions into ordinary life. Has prospects for unlocking the labor potential of individuals. It has been established that transhumanism can become an alternative to mercantilism and bring thinkers and practitioners back to the human being as a central category. It is also about the possibilities of a new disclosure of labor potential. For example, the use of modern technology will bring the disabled back into the workforce, that is, it will open up possibilities for a new disclosure of their labor potential. Also, the improvement and their biological implementations will significantly increase the results of other workers, uncover their capabilities, etc. At the same time, transhumanism has some difficulties in implementation on the technical side - it is said that the high cost of the necessary operations and technical devices will not be cheap and will require significant investments. There are also possible negative social consequences, the emergence of new "phobias" in society, where people who dare to experiment with their bodies may be unprepared to work with them. It can be assumed that such cases will not contribute to the quality of the workforce. Also, it is obvious that further actualization of research related to the ways of introducing technological innovations, their legal regulation, and justification will be needed.

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