An Anthropocentric Perspective in Posthumanist and Transhumanist Discourse

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Posthuman and transhumanist discourse plays an essential role in shaping modern science. A successive redefinition of the concept of "human" takes place, broadening it to axiological and epistemological aspects. Postmodern reflection on this issue boils down to creating a new term "posthuman," which today is the subject of research by scientists representing various perspectives — philosophical, cosmological, anthropological, and cultural. Nevertheless, the topicality of this issue goes hand in hand with the increasingly emerging problem of extending human existential space. This possibility appears with the exit into the extra-terrestrial sphere. The cosmos becomes a place that today becomes the object of particular interest and exploration by man. Therefore, the author of the article presents a philosophical and cosmological perspective of the process of redefining the concept of "human" by implementing these considerations in the posthumanist and transhumanist discourse. It has been indicated the basic premises shaping this matter — technological, political, ideological, and economical. At the same time, he emphasizes that despite technological and scientific achievements, the anthropocentric model still occupies a central place in the scientific discourse, which boils down to the claim that man is the determinant and indicator of this process.

Keywords: posthumanism, transhumanism, technological development, anthropocentric model of the world, cosmic existential space

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Introduction

The contemporary scientific debate more and more often reaches for the subject of the concept of "human," focusing on the process of its redefinition, which is a consequence of the changes that took place in the 20th and 21st centuries on the ontological and epistemological level. The implication of scientific and biotechnological achievements that accompanied the development of postmodern philosophical thought was the creation of the term "posthuman."

It is an umbrella term covering various perspectives (philosophical, cosmological, anthropological, cultural, and sociological) of most existential spheres of man, starting with posthumanism and transhumanism, and ending with a diverse panorama of anti-humanism or meta-humanism (Ferrando, 2013: 26-28). In July 2019 in Lille held an international scientific conference *Critical Posthumanism and Transhumanism. The Posthuman Paradigm Shift*, the central message of which concerned the change of the current humanistic paradigm. Among the topics discussed during the conference sessions was the issue of the future of man as a "citizen of the Earth." The subject of the process of redefining the term "human," apart from its topicality, raises a lot of controversies.

Further international scientific initiatives are planned to resolve the disputed issues. The main task of such activity will be to develop a pragmatic approach allowing reaching the consensus on many levels. In 2021, there will be two significant events related to the issues at hand. The first is the international conference in Tokyo scheduled for April 2021, the theme of which will be *Cyborg Anthropology and Posthumanism*. In November, however, another international conference will be held in Cape Town, which will, in a way, continue the April initiative. Scientific and technological development in this context is a determinant influencing the appropriate positioning of a man in the structure of the world. One of the dominant approaches in the scientific discourse today is the anthropocentric model, which presents the human being at the center of the research process. Learning about human nature has been a fundamental goal of many generations of scientists. Nevertheless, its existence is primarily related to the cosmological perspective of the existence of the world (Lupisella, 2020: 97-98).

Today's understanding of the concept of "human" in his existential essence significantly goes beyond the image of a human being established over the centuries. This resulted in the appearance of such phenomena as posthumanism and transhumanism in the scientific discourse. The selective approach of the author of this article to this issue is dictated by the fact that the current of posthumanism and transhumanism coexist together as two dynamically developing scientific perspectives, between which there is no clearly defined line separating one from the other in terms of their conceptual scope. Therefore, making a thorough scientific reflection, taking into account these two perspectives of redefining the term "human," is an indispensable factor shaping the scientific debate in this area.

The author's assumption is to present the philosophical and cosmological perspective of human existence in the Universe. In the context of this article, the philosophical component refers to the inner sphere of man, which determines his nature. On the other hand, the cosmological aspect is primarily the external sphere, which, as a result of successive scientific discoveries, widens the existential space of man (Dick, 2015: 41-43). Therefore, the aim is to indicate the potential directions of development of the existence of a human being within the framework set by scientific and technological achievements. The world is rational, which manifests itself primarily in the possibility of its rational perception by man. In 1936, the Journal of the Franklin Institute published an article quoting Albert Einstein's words that "The eternal mystery of the world is its comprehensibility ... The fact that it is comprehensible is a miracle" (Robinson et al., 2018). But getting to know the world requires an intellectual effort, which comes down to both being interested in the nature of being and in the relationships between specific beings. Therefore, this article has been divided into two main parts. The first presents a philosophical approach to understanding posthumanism and transhumanism, which is a direct reference to the axiological and ontological sphere of human functioning. In the second, the author referred to the cosmological perspective

of human existence and significance in the Universe, thus emphasizing the anthropocentric perspective of scientific discourse in this area.

Posthumanism And Transhumanism In The Scientific Discourse

Posthumanism and transhumanism began to gain importance in the late 1980s and early 1990s. Nevertheless, posthumanist and transhumanist reflections appeared in the scientific discourse several decades earlier. In postmodern literature, the term "posthumanism" appeared in 1977 thanks to the work of Ihab Habib Hassan called *Prometheus as Performer: Toward Posthumanism Culture?* (Hassan, 1977: 831-835). In turn, transhumanism was a phenomenon discussed by Julian Huxley in his work *New Bottles for New Wine: Essays*, which was published in 1957 (Huxley, 1957: 31-37). These two trends are derived from the broadly understood postmodern reflection, for which Bauman's concept of postmodernity is close. It is related to the belief that man does not have a permanent nature and that his identity exists as an unfinished project. The concept of "human" is in constant transgression, undergoing various kinds of scientific and biotechnological processes. Zygmunt Bauman pointed out that postmodern reflection gets rid of the need for any theories of morality — ethics, philosophy, religion, worldview, because postmodern society funds itself morality without referring to science and recommendations. Bauman's description of postmodernity is a clear portrait of the desacralization and secularization of contemporary culture in Western societies. There are a gradual decay and the sudden collapse of some modern illusion; belief that human fate will become fully transparent as soon as we have all the necessary knowledge; belief in complete mastery of the future. This fact underlines the anthropocentric model that determines the development of contemporary scientific discourse (Bauman, 2000: 41-43; 108-112).

Posthumanist and transhumanist thought, however, did not fully develop until the first half of the 1990s, thanks to feminist theorists in the field of literary theory and literary criticism, which in later years also became known as critical posthumanism. During this period, these issues found themselves in the sphere of interest in philosophical, cosmological, and cultural studies. Significant contributions to the development of this idea were made, among others, by Judith Halberstam and Ira Livingston through their work *Posthuman Bodies*, Neil Badmington through the work of *posthumanism,* and Andy Miah by publishing the book *A Critical History of Posthumanism*.

The end of the 1990s was, in turn, the time of a redefinition of the meaning of the term "human," which took place in the context of the scientific and biotechnological achievements to date, often proving a departure from the classical anthropocentric philosophical thought. Such a move is nothing new in the history of science, because the Copernican revolution, introducing the cosmic heliocentric model instead of the geocentric model prevailing in medieval thought, significantly influenced the position of man in the Universe. Nevertheless, Nicolaus Copernicus, with his work *De Revolutionibus Orbium Coelestium,* already had his predecessors in the context of departing from the anthropocentric model. Clive S. Lewis, in The *Discarded Image,* described the cosmological approach to understanding the concept of "human" in medieval literature. He refers to the works of, among others, Alain de Lille, who, using the metaphor of the "medieval city," by implementing the Universe in this image, indicated that the place of man in this structure is outside that "city." Dante Alighieri applied a similar invective to the concept of "human." This author pointed out that the world is geocentric and theocentric, but anthropo-peripheral (Lewis, 2010: 63-68; 72-74). The anthropocentric model returned only thanks to Renaissance artists, including Leonardo da Vinci with his *Vitruvian Man*.

Thus, the scientific discussion in its various configurations on the question of human nature is not a new topic, but has a long history. Nevertheless, the prefix "post" in this context means broadening the understanding of what is "human," also including other beings (Braidotti, 2013: 61-67). According to the idea of posthumanist thought, it is based on the denial of any hierarchy of beings and their evaluation. Moreover, the aforementioned prefix "post" indicates a change in the meaning of the concept of "human." It postulates the extension of the idea of emancipation also to beings that are not representatives of the Homo Sapiens species. This is one of the manifestations of a transgressive tendency, which indicates that posthumanism is affirming in nature, consisting in a progressive striving to "go forward" and treating the emancipation process as permanent and implementing in this process also species distinct from man (Mix, 2020: 58-60).

The issues of posthumanism and transhumanism are present not only in the scientific sphere, but also have political and ideological connotations. Since posthumanism emphasizes the variability and relativity of the concept of "human," it is necessary to reflect on what is "human" and what deserves "human" treatment (Zawojski, 2017: 69-71). It follows, one of the fundamental problems of posthumanism arises, referring to a philosophical current that is not only ethical and normative but, above all, political. In the introduction to the book *Vibrant Matter: A Political Ecology of Things*, Jane Bennet writes about the philosophical and political aspect of her work, implementing it in the broadly understood issues of posthumanism and transhumanism: "The political project of my book is, most ambitiously speaking, to encourage a more intelligent and balanced commitment to relationships with living matter and living things. The guiding question, then, is how would political responses to public problems change if we took the vitality of inhuman bodies seriously?" (Bennet, 2010: VI-IX).

The political nature of posthumanist discourse often boils down to questions of a religious nature. It happens due to the fact that the assumptions of posthumanist thought are not compatible with religious thought. This approach implies some tensions between the state, the Church, and science, identifying scientific institutions that conduct research on the essence of human existence with this concept (Heller, 2020: 12-17). The fundamental question in this regard boils down to the place that religion or morality should take, in the context of posthumanist and transhumanist reflection?

So, should the religious beliefs of a specific community/nation interfere with the scientific development of that community/nation? Referring to the content recorded in the Book of Genesis, regarding the fact that man was created in the image of God and is the most perfect of all creatures, it provides a canvas whose violation refers to the essence of the contemporary ideological debate in some countries, especially in those where the Church/religion occupies a significant place in the institutional hierarchy. How to treat, for example, the process of cloning living creatures consisting in the creation of organisms having the same genetic information as the donor? Perhaps as long as this phenomenon is confined to non-human mammals, the axiological and ethical aspects of cloning will remain unattended by the Church/religion. Nevertheless, when in 2004 the world heard about the success of a human nuclear transfer by a South Korean research team, it was met with an ambiguous reaction from political, religious, and scientific circles in many countries around the world (Tamkins, 2004: 623).

The desire to have full knowledge of human nature dates back mainly to the Renaissance when the anthropocentric model in science returns. At that time, there was a belief in the divine perfection of man. One's body was a form of perfect symmetry boiled down to the

claim that it had been coded according to the most sophisticated mathematical relationships and proportions. This reflection was the basis for the shaping of, among others, the digital turn, which today plays an essential role in scientific and technological development. The mathematical nature of this phenomenon boils down to the claim that the world is a system of digital codes. This narrative also applies to a human being because it treats genetic matter even as a kind of code. This position has a significant impact on the understanding of genetics, which is often equated with the development of digital design. Thus, if DNA is considered code in the cybernetic sense, this kind of finding allows you to program and manipulate genetic atoms of particles in the way possible with various types of software being a tool in the hands of specialists (Celiński, 2013: 14-15; 23-25).

Thus, posthumanism and transhumanism share a common interest in technology. However, the way of reflecting on this issue is different, which is manifested in the structural matter of these trends. Posthumanism does not treat technology as its primary goal and value, which allows its theoretical foundations to be reduced to forms of essentialism and technological reductionism. Technology, in this context, is not attributed to divine qualities. In contrast, transhumanists regard technology as a valuable element of development. Therefore, mentioning the mathematical nature of perceiving the world — perceiving reality as a code system — it is possible to interfere with the genetic code and modify it through appropriate technologies. Katherine Hayles points out that the element connecting transhumanism and posthumanism in the sphere of technology is the concept of techno genesis (Hayles, 2011: 217-220).

Technology appears in the posthumanist debate through feminism, which refers to the concept of cyborg introduced into the scientific discourse by Donna Haraway. The idea according to which scientific and technological development appears in posthumanist discourse concerned, first of all, the deconstruction of dualisms and divisions which were reduced to, among other things, groups: human and non-human animals, biological organisms and machines, or to physical and non-physical reality (Haraway, 2000: 51-55). Posthumanism is a kind of practice that often carries out imaginary visions, treating them as real in the future. The posthumanist approach boils down to "How to do this?" It primarily refers to technological and scientific achievements but treats them only as necessary tools to achieve its goals. Posthumanism, for example, does not oppose the idea of cosmic migration. Still, because of its postmodern and postcolonial roots, it cannot unequivocally endorse the concept of cosmic migration, or to use a different term — colonization — which is often found in transhumanist literature. This is an exemplification of how posthumanism and transhumanism implement the same topic in their narrative while referring to different scientific perspectives based on different theoretical heritage (Ferrando, 2013: 31-33).

The Cosmological Context of the Posthumanist and Transhumanist Narrative

Posthumanism refers primarily to the actual construction of a human being. Representatives of this trend are increasingly departing from aspects related to feminism, racial criticism, queer or postcolonial issues. However, they focus their attention on non-human beings, such as robots, biotechnological chimeras, or "beings" with artificial intellect (Bailey, 2005: 87-94). Contemporary posthumanist researchers try to avoid reflections related to the hybrid of human existence, thus finding themselves in a scientific dilemma between strictly human and non-human beings (Hooks, 1984: 45-51). On the other hand, transhumanism, as has been emphasized many times in this work, refers to the biological and technological

evolutionary potential of a human being. The central tendency of transhumanist reflection is striving for the improvement of man. The implementation of this goal is based on scientific and technological achievements — those that existed, those that exist, and those that are in the conceptual stage. Regenerative medicine, nanotechnology, life extension techniques, mind-shifting, and freezing the body are just a few examples of the possibilities offered by modern science and technological development (Ferrando, 2014: 221-223). The *Declaration of Transhumanism* was adopted in 1998 to codify these aspirations, which contains the basic postulates of the transhumanist trend.

It was extending the epistemological framework of the concept of "human" sparked a need in the search for a new existential space. The assumptions of posthumanism and transhumanism result in an anthropocentric model, which in the postmodern world is redefined with the appearance of new beings or the behavior of the existing ones taking on a new form and nature. The aforementioned *Declaration of Transhumanism* contains postulates that set the direction for the development of transhumanist thought, which results in their actual implementation. In this context, it is worth referring to the question of freezing people. One example of such practice is the work of Fred and Linda Chamberlain, who founded the ALCOR non-profit organization in Scottsdale (Arizona) — the *Alcor Life Extension Foundation* — dealing with cryotherapy of the bodies and brains of people who have been diagnosed with death. The purpose of ALCOR is to revive frozen people when science reaches an appropriate level to heal the causes of death and repair the damage caused by freezing (ALCOR, 2020). The implementation of such practices would have a significant impact on the modern world, raising numerous questions. So, what if the technology to bring people to life is invented? Won't it overpopulate the planet and exhaust the natural resources that are the source of the existential energy of human beings?

There is no doubt that man has always strived for perfection and wanted to get to know the world around him. Reasonable attempts in this regard were made, among others, by nineteenth and twentieth-century philosophers and scientists, whose aim was to create a "superman." Fyodor Dostoyevsky or Friedrich Nietzsche, in their literary works, undertook the task of creating the idea of this "superman." However, the question that raised considerable controversy in this context was the question of extending the existential space. This approach was a direct call to space exploration. Nevertheless, it is worth remembering, as has already been emphasized in the previous part of this article, that the colonization of space does not correlate with the assumptions of the posthumanist idea. It is legitimate to emphasize the pragmatic approach in this matter because by expanding the concept of "human," one should also be open to expanding the existential space of a human being.

The cosmos has always been the object of particular human interest. Already at the turn of the 6th and 5th centuries B.C., the Pythagoreans made their first philosophical reflections on the structure of the cosmic order. In their investigations, they relied on numbers as the fundamental principle shaping reality. The actual content of these scientific considerations was the search for evidence of order by indicating number and harmony as factors determining the properties of things (Ghyka, 2014: 23-25). Nevertheless, such a distant historical perspective only emphasizes the importance of the cosmos in the scientific discourse of man. Johannes Kepler, the author of the famous novel *Somnium*, described the planet Earth from the perspective of the moon, describing it as *Levania* (Rosen, 2003: 32-35). Kepler's work can be considered the world's first science fiction novel. Metaphorically, it can be assumed that it is precisely from the level of literary works in the 20th century that, thanks to the Soviet Sputnik, the first artificial satellite sent into space, a man was able to get to know

cosmic space, but above all the planet Earth from the perspective of space. Nevertheless, it is worth remembering that Sputnik was not the first human-made object to reach extra-terrestrial space, because it was the "infamous" German V-2 rocket launched in 1944. It became the basis of the rockets built by the Soviet Union and the USA, leading the famous arms race, also covering outer space (Filiciak et al., 2015).

The cosmos as an object of scientific discourse is a multifaceted issue. Therefore, the author of this article implements a cosmological perspective in the considerations of posthumanism and transhumanism. The central reflection in this context comes down to the search for human existential space in the future. Nevertheless, the Universe for many researchers for centuries was limited only to the Solar System. Then, until the beginning of the 20th century, our Galaxy — the Milky Way, was the object of study. Knowledge of the existence of other galaxies was unavailable. Reflection on the cosmos was still, in most cases, the domain of philosophical and theological speculation. Discoveries both in the field of the theory of physics — the theory of relativity and nuclear physics — as well as observations mediated by the latest technological achievements, allowed to conclude that there are other galaxies besides the Milky Way, thus broadening the image of the Universe. Thus, modern cosmological theory dates back to the 1960s with the discovery of microwave background radiation, the residual light from the hot Big Bang. A systematic description of this process was presented in his book *The First Three Minutes* by the outstanding American physicist Steven Weinberg (Bajtlik et al., 2013).

In the context of the contemporary scientific discourse on the trends of posthumanism and transhumanism, the discovery of a new space creates a potentially new chance to expand the existential area. The question remains, however, to what extent did the man know the Universe? Is it possible to cosmically colonize other planets with the present advancement of scientific and technological achievements? In 2016, the discovery of a planetary system on the star Proxima Centauri was announced, which, apart from the Sun, is the closest star to our planet. It is located four light-years from Earth, and Proxima Centauri is a system of three stars — Alpha Centauri A, Proxima Centauri, and Alpha Centauri B — orbiting each other. It is important in the context of these considerations that Proxima Centauri has a planetary system (Worth & Sigurdsson, 2016: 4-5). Besides, in 2017, the results of research conducted since 2015 were published, indicating the existence of a planetary system around the TRAPPIST-1 star (Transiting Planets and Planetesimals Small Telescope) located 39 light-years from Earth in the constellation Aquarius. All the planets in the TRAPPIST-1 system orbit very close to their star due to its size, which is much smaller than the Sun. The closest of these planets — TRAPPIST — 1b — orbits only 1.65 million km from the star, which translates into the time equivalent of 36 hours. From the perspective of these considerations, this planetary system is interesting because 3 out of 6 planets have temperature values close to the rates of the planet Earth. This fact means that the physical conditions, taking into account only the temperature, as the rest of the indicators are not precisely defined, allow to state the presence of water there (Turbet et al., 2020: 100). Nevertheless, the distance of this planetary system of 39 light-years indicates that at today's speeds, it would take about 1.5 million years to travel from Earth to this place. Therefore, it requires new technological and scientific solutions, enabling, among other things, the perspective of overcoming certain distances faster.

Thus, the pragmatic approach to the issue of extending the existential space of man is now preferably at the stage of theoretical calculations. Getting to know the Universe from a philosophical and cosmological perspective is still, as well as hundreds of years ago, the priority goal of all humankind.

Conclusions

The premise of this article was to analyze the process of redefining the concept of "human" from the perspective of posthumanism and transhumanism. This reflection has been implemented in the area of philosophical and cosmological discourse. The need for this resulted primarily from the correlation between the process of expanding the concept of "human" and the search for new existential spaces in the form of cosmic regions. Three main conclusions can be drawn from the above considerations.

First, posthumanism and transhumanism introduce more questions than answers through their narrative in academic discourse. It comes down to the hypothetical assumptions and ideas propagated by these trends. The scope of knowledge about human nature, despite many achievements in this field, is still insufficient. There are often situations that are not amenable to rational explanation. So, what are we dealing with, a miracle? Should we, therefore, revert to the theocentric model? Questions of this kind are present in modern science, which undoubtedly points to a long process that man, as a rational being, must overcome to find answers to such problems.

Secondly, posthumanist and transhumanist reflection often "run" counter to the ideological or religious assumptions of individual states/nations. The implication of this state of affairs is ethical and moral antagonisms between different environments. The question remains, however, to what extent is it possible to interfere with human nature? Where is the limit beyond which it would mean being able to speak of a non-human being? Questions of this kind are currently a sphere of discussion among representatives of the scientific community, especially those representing posthumanist and transhumanist trends. Nevertheless, the anthropocentric model remains the determinant of these considerations because it is the man as an object that is the primary determinant of this border.

And finally, thirdly, posthumanism and transhumanism, which aims at the one hand to implement new phenomena and solutions, and on the other — to improve the existential improvement of human beings, causes some problems primarily related to the issues of overpopulation of the planet and the depletion of natural resources. In this context, recalling the migration processes to space, which constitute an alternative and the possibility of extending the space to live, it is also worth asking about the time perspective and technological possibilities responsible for this kind of phenomenon. Space exploration requires a lot of money, and today more than half of the world's population lives in extreme poverty. Therefore, can we talk about scientific and technological development, which is related to the economic potential of individual entities/states, as a process that is rational from the development of the entire humanity? The question of the rationality of technological development in the context of the whole of humankind also boils down to the issue of resources at the disposal of individual entities/countries. First of all, it is about economic resources that allow the involvement of the best specialists in the process of developing new technologies. Hence, there is also a disproportion between various actors/states in the international arena. How, then, would the inhabitants of Nigeria or Bolivia, or one of the Oceania islands, perceive the current of posthumanism and transhumanism? And are they not the same people as the Americans, French or Japanese who invest considerable sums in technological development and research? This question is where the essence of the anthropocentric model in science manifests itself, because man is the central object of discourse, and it is a man who should be taken into account as the main priority.

Nevertheless, the economic stratification of the world is one of the many reasons why it is worth discussing this issue with a broader level of engagement with policymakers from

different countries. Therefore, initiatives such as international conferences and meetings of scientists, mentioned in the introduction to this article, play a significant role in this process. It should be remembered that the greater the interference of science and technology with human nature, the newer questions and problems arise, the solution of which is not always a useful development aspect.

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