Keywords

Anthropology, transhumanism, posthumanism, human enhancement, artificial intelligence, extropy, singularity

General introduction to the topic of the paper

From the dawn of modernity to this day, the question of man is undoubtedly the question central to our age. It began, spiritually (or ideologically), in 1882 with the proclamation of "death of God" and the Dionysian exaltation of the Superman by Friederich Nietzsche. The 20th century took place in the shadow with sinister accents of the most gigantic ideological denial and physical suppression of man, in the name of class, religion or ideologies. A veritable triumph of the "non-human", the 20th century was the true negative apotheosis of the inhuman. But if the totalitarian regimes of the past century wanted to force reality on a certain political-ideological path, thus amputating and disfiguring it, the transhumanist project is a much bolder one: overcoming this stage of proposing a utopian future, quite uncertain, transhumanists want to redefine reality itself, including the human and humanity.

We believe that the approach to the problem of transhumanism is very topical for the life of society, in general, and that of the Church, in particular, in a very pressing way, since the promoters of this current believe that humanity, to the extent of dependence on technology, has already entered a new stage, that of posthumanity. Closely related to the evolutionary idea, transhumanism argues that humans must capitalize on advances in technology in the goal of an active and intelligent role in the evolution of the human species, with the ultimate goal of improvement the human race as a whole. Driven by Darwinian theory, the idea of intelligent evolution, controlled by man himself, took wings in the wake of technological advances, which recorded remarkable, increasingly daring leaps in short periods of time.

Transhumanism is a still loosely defined movement that has gradually developed over time especially over the last three decades, and which promotes an interdisciplinary approach to understanding and evaluating opportunities to enhance the human condition and the human organism as a result of technological progress. Attention is paid to some already classic technologies, such as genetic engineering and informatics, as well as some with more recent developments, such as molecular nanotechnology and artificial intelligence. The enhancement possibilities discussed include radical extension of human life span, eradication of disease, elimination of suffering and increase of intellectual, physical and emotional capacities. Other transhumanist themes include space colonization (see the exploration missions carried out on the planet Mars) and the creation of superintelligent machines, along with other potential developments that could profoundly alter the human condition. An important point to note is that transhumanist

intentions do not limits to gadgets and biomedical technology, but also encompasses economic, social and cultural concepts.

Philosopher Nick Bostrom, one of the main promoters of transhumanism, founder of the World Transhumanist Association, considers human nature as a work-in-progress, a half-baked dough that we can learn to reshape into the form in which we want. Current humanity does not have to be the end point of evolution. In his opinion, by using responsible science, technology and other rational means, we will eventually succeed in becoming posthumans, beings with far greater capabilities than humans currently have. Transhumanism is rooted in secular-humanist thought, but is all the more radical by that it promotes not only the traditional means of improving human nature, such as education and cultural development, but also the direct use of medicine and technology to exceed some of the basic biological limits.

An important document for the research of this phenomenon is the Transhumanist Declaration, which we further state: "(1) Humanity will be radically changed by technology in the future. We foresee the feasibility of redesigning the human condition, including such parameters as the inevitability of aging, limitations on human and artificial intellects, unchosen psychology, suffering, and our confinement to the planet earth. (2) Systematic research should be put into understanding these coming developments and their long-term consequences. (3) Transhumanists think that by being generally open and embracing of new technology we have a better chance of turning it to our advantage than if we try to ban or prohibit it. (4) Transhumanists advocate the moral right for those who so wish to use technology to extend their mental and physical (including reproductive) capacities and to improve their control over their own lives. We seek personal growth beyond our current biological limitations. (5) In planning for the future, it is mandatory to take into account the prospect of dramatic progress in technological capabilities. It would be tragic if the potential benefits failed to materialize because of technophobia and unnecessary prohibitions. On the other hand, it would also be tragic if intelligent life went extinct because of some disaster or war involving advanced technologies. (6) We need to create forums where people can rationally debate what needs to be done, and a social order where responsible decisions can be implemented. (7) Transhumanism advocates the well-being of all sentience (whether in artificial intellects, humans, posthumans, or non-human animals) and encompasses many principles of modern humanism. Transhumanism does not support any particular party, politician or political platform".

Transhumanism's push towards reinventing the human, humanity and the future it's the fundamental component of three technological and cultural currents, in full swing expansion: Artificial Intelligence (AI), human enhancement, and transgender ideology. The means of implementing these transformative developments are largely technical and pharmacological and they promise freedom from reproduction, from disease and from the human body itself, and,

ultimately, freedom from mortality. In this assembly, Artificial Intelligence provides the repository of human consciousness freed from the body. There are experimental attempts to isolate and transfer consciousness, to use it to control bodies that do not belong to us, and to expand it with the help of technology and biotechnology. Once these goals will become accessible, Artificial Intelligence will provide the means of implementation. Artificial Intelligence is about more than creating copies of beings capable of knowledge, it is the extension and augmentation of the original human form. Adding human items to a technological product or technological products to man is part of the same project. There is hope that Artificial Intelligence will provide the possibility of connecting the mind to a cloud, for an extended AI brain to have immediate access to gigantic information resources. Instead, one person's mind and knowledge will thus become accessible to others, making possible the birth of a collective consciousness.

When we talk about Artificial Intelligence, it seems that there are no limits in this area for research. According to Ray Kurzweil's predictions, when we talk about the problem of artificial intelligence we think about the crucial moment in human history when the level of activity and performance of the present human brain will be surpassed by those of technology, and human life will be irreversibly transformed. Probably quite soon, since the premises are already in full swing. Either we accept it or not, there are two scenarios: either man dominates machines, or he will become dependent. More clearly, human intelligence will be transplanted to technology, and the man will receive a biological or digital implant, a hypothesis that Father Jean Boboc considered more likely, although the first either cannot be excluded. So, it would not only be about building robots, but also about the robotization of the man, many activities being already completely dependent on the contribution of technology. The prophet of the technological Singularity, Ray Kurzweil, predicts the emergence, in the years 2045-2050, of a non-biological intelligence a billion times better than the human mind. By transposing this evolutionary process of nature onto technology, it will take control over its own evolution in a movement of uninterrupted and exponential growth.

Human enhancement, also known as biohacking, started with splicing between the aesthetics of body modifications and biomedical advances. If at first biohacking referred to a set of countercultural gestures, such as tattooing and piercing or tongue split, technology today allows bodies to be augmented in a proactive way. Radio frequency identification chips can now be implanted under the skin and used to identification, electronic payments, opening secure doors or storing information. Magnetic implants give the wearer the ability for an extra-sensorial perception of magnetic fields, thus the body becomes key, credit card and depository for information which the mind cannot memorize. Examples such as that of the artificial womb or gestation are evidence of a dramatic reversal, occurring as a result of the biomechanical approach to the human body. The

release of the reproductive function of the body means the clearance of humanity from its own physical continuity, the exclusion of man and woman from the act of procreation, which calls into question also the relevance of the gender. By asserting that a person is more mind than body, transgender ideology becomes an important component of the transhumanist project.

Over the past few decades, there has been a substantial increase in social awareness and public discussion regarding the transgender phenomenon. This was driven by two distinct developments. The first is acknowledging that some people experience the feeling of gender incongruence, i.e. the mismatch between a person's biological sex and perceived gender. This situation has caused considerable discussion about the appropriate clinical response to such conditions, especially in the light of the possibilities offered by the evolution of medical and surgical technologies. Secondly, the therapeutic discussion became intertwined with an ideological discussion about the nature and reality of gender itself. The development of gender theory, which is far from neutral from an ideological point of view, it gave additional impetus to this debate. Most contemporary forms of gender theory argue that gender is not binary, it runs on a spectrum wide and is not stationary, but fluid. However, today, many people who identify as transgender are convinced that there are only two genders, but that, in their case, the gender does not match with the biological sex. Regarding surgeries that alter sexual moods or anatomical expressions of sexuality, there is a traditional Christian aversion. The Christian understanding is that gender is not a socio-cultural construct, and the statement from the book of Genesis, that God created man and woman, together with its confirmation by Christ in The Gospels, provide a normative account for human sexual dimorphism. The deep reality of people is either male or female, however hard to identify it could be, sometimes, this reality.

The purpose and general objectives of the paper

The motivation behind the choice of theme resides in the fact that transhumanism is intended to be a movement radically transformative of human existence, which we consider to be in contradiction with Christian anthropology. Of course, the will to improve one's own life and the human condition facing finitude is the sign of an existential search for the meaning of life, present in all religious traditions. In Christianity, this desire for perfection is realized in Christ, through the deification of human nature. In the plan of transhumanist ideology, salvation becomes an approach of overcoming the human condition that translates into the hope of human transformation through technology, in new forms of human, transhuman or posthuman. The new man, changed through NBIC technologies (nanotechnologies, biotechnologies or bioengineering, computer science and cognitive sciences), not only would no longer submit to biological death, but, moreover, he will overcome his own condition, possessing extraordinary intellectual, physical and moral capacities.

Furthermore, it has been shown that the transhumanist manifesto is an initiative with a religious character, not of the type of biblical or quranic prophecies, but in the form of self-fulfilling prophecies. Transhumanism is interpreted as also being in the sphere of religious phenomena and not only those of a scientific nature, since it is intended to create a sense of attachment to a certain hypothetical program, achievable in the future.

Transhumanism was called by Julian Huxley a "religion without revelation" because the desire to give to the man the ability to self-transcend through technology and the assumed ideal of modifying or reconfiguring the human is inscribed in a project that considers conferring a saving vocation to technology. This ideological movement has the ability to become a religious project. Relativizing the dignity and worth of the human person through the intention to create new forms of the individual (for example, through man-machine fusion), becomes evident the demiurgic temptation of transhumanists to be the origin of other individuals. The French philosopher Jean-Michel Besnier draws our attention to the fact that this work of creation shows the aspiration of people to replace the Creator Logos, the One Who is at the origin of all creation.

The warning of this good connoisseur of transhumanist phenomenology does oblige us to analyze to what extent is transhumanism a trend that opposes Christianity, as well as the possible interferences between the two. Theology testifies the incomparable value of the human person, through the dichotomous character of the human being, material and spiritual, and the special dignity which emerges both from the manner of its creation and from its ontological orientation towards the Creator. The anthropological and ethical difficulties raised by the transhumanist project calls for a more thorough research of this approach which, in the last instance, may lead to an irreversible alienation of human existence, through the widespread loss of reference to the transcendent.

The hypothesis we wanted to argue during the research is that transhumanism, despite its eclecticism, represents the unitary attempt of postmodernity to acquire self-divination artificially, in which it perpetuates the essence of the fall into sin and reaffirms dehumanization as the absence of the work of regenerative grace of God. We tried to show that by using human nature and culture marked by scientism as bulwarks against God, transhumanism tries to reconfigure the human and to gain immortalistic deification and earthly eternity on its own account, obstinately claiming it as the infallible result of unlimited scientific progress. Opposing man's finitude and limitation, transhumanism is deeply marked by the aspiration towards divinization, which, by exalting it, invites man to create himself as a subject of history.

In the first chapter of the work we show the fact that, in the Orthodox conception, Christ is the archetype of the man, and this christological imprint is applied at the very moment of creation, because, in the reality of the divine paradox, the old Adam is created in his own image The New

Adam, that is, Christ's. One of the dimensions of this christological constitution is that the man is a rational being because it was created in the image of God. It is constituted of soul and body, stands at the center of creation and unites matter and spirit in itself. In the same chapter I showed that the term transhumanism designates generically the attempt to conquer and overcome the limits of the human, using scientific and technological means. Believing that humans, in their current biological state, are conditioned by their limited possibilities, transhumanists mainly refer to four aspects that should be subject to augmentation: extending the period of life in which human beings are healthy, both mentally as well as physically; increasing cognitive ability; increasing the level of emotional capacity; increasing physical abilities. I also presented the fundamental transhumanist concepts, as expounded in the works of transhumanist authors Max More, Ray Kurzweil, and Nick Bostrom.

In the second chapter are presented the ideas tangential to transhumanism of three greats thinkers from the Christian tradition, both from the West and from the East: Francis Bacon, Nikolai Fedorov and Pierre Teilhard de Chardin. In the third chapter we showed that human augmentation denotes biomedical interventions that are used to improve the human shape or functioning beyond what is necessary to restore or sustain health. The main focus is on interventions that make biological changes in the human body and brain, using pharmaceutical, surgical or genetic techniques, analyzing the various types of augmentation: physical, cognitive, moral, emotional etc. In the last chapter, the fourth, I revealed the fact that transhumanism is a cultural phenomenon that has its roots in the secularist ideology of Enlightenment progress and promotes technological change as the engine of human progress. More than mere reflections on the capacity of technological change to enhance life and to generate progress, transhumanism also offers a vision of the moral order of the invidual and society in relation to the technology-driven transformation of the world, providing a veritable scenario of the eschatological future in cyberspace.

Thematic framing and research methodology

This work was developed as a doctoral thesis within the Doctoral School of Theology of the "1 Decembrie 1918" University from Alba Iulia, at the Moral Theology specialty, under the coordination of the Most Reverend Father Irineu Pop, Ph.d., Archbishop of Alba Iulia. In the context in which transhumanists consider artificial human augmentation a "moral duty", thus offering a reductionist vision of the human future, which would inevitably lead us to a biotechnology-oriented society with "valid" (posthumans) and "invalid" (subhumans) subjects, recent decades have witnessed intense debates about the great dangers of a possible establishment of transhumanism in our social life. The possibility to intervene on the quality and characteristic human patterns not only for therapeutic reasons, opened the door to the eventuality of a society marked by genetic discrimination, racism and eugenics, a society in which will find their place only

those healthy, strong and augmented, those who meet certain standards. Our research wants to reaffirm the fact that the Church is obliged to ensure among its priorities not only the welfare of people with deficiencies and disabilities, but also to protect human diversity and, ultimately, the man itself, the being who by its biological structure and place in the material expression of the world, holds a supreme position, and therefore must be respected in regard to its biology, increasingly called into question by the assault of biotechnology. Given that the Orthodox Church is faced with the rapid progress of biotechnology, and these advances are not accompanied by a mature meditation on their meaning and the risks they involve, our work seeks to place itself in a mediating position between the scientific discourse, most often completely separated from God, and the Christian-Orthodox theological discourse, where God is the Creator, and man must relate his existence to Him.

The intervention on the biological creation of the individual human has become a definite possibility through various scientific processes, such as for example that of cloning, so we can unequivocally state that the entire natural mechanism of creating a new body can be interfered with and influenced. This conquest of science in general, regarding the interference in the development of some biological mechanisms, however, brings before us the concept of ancestrality of the human creation, which is faced with the paradoxical situation of being modified by his own creativity. The man of our century, forgetting about God Whom he wants to substitute, believes blindly and excessively optimistically in his autonomous reason, with the help of which he wants to dominate nature and steal its secrets of life, because it wants to transform or duplicate technologically natural products, replacing them with artificial ones, in order to be his own creation.

You don't have to dig deep to find the reasons for scientism antipathy, and even more so little of transhumanism, against traditional Christian doctrines, such as the existence of an Almighty and Righteous Creator God, the immortality of the soul or the resurrection of the body. God's commandments, and perhaps even His very existence, impose limits on human freedom. If human beings are to take control of their own evolution, say the majority of transhumanists, they must put aside childish fables about God and have the courage to place their own goals in nature. If well-known modern philosophical humanism tended to rely solely on educational and cultural refinement to improve human nature, transhumanists want to apply technology to overcome the limits imposed by our biological and genetic heritage, and these applications have raised legitimate concerns about the radical nature of the transhumanist project and its implications in the potential discontinuity between human and posthuman.

Long time a fairly small or even marginal movement in philosophy and futurology, transhumanism has gained strength as a cultural and intellectual movement, and is becoming more so a global political force. We believe it is crucial to pay scholarly appropriate attention to

transhumanism, mainly because of its recent and ongoing rise as a cultural and political force, with multiple simultaneous ramifications in the discourse of biotransformative technologies that it focuses on, starting from genetic engineering, brain-machine interfaces or Artificial Intelligence.

Given that the present work proposes an interdisciplinary character, within the research methodology we used several scientific methods. Thus, we used the analytical method, through which we followed the thinking of numerous theologians, philosophers, political scientists or scientists who analyzed the transhumanist current and its directions of development from different points of view, both favorable and unfavorable. Also, to a good extent, we made use of the comparative method, with the help of which we mirrored transhumanist anthropology and its ideals of transcending the human condition, on one hand, and patristic anthropology and its superior qualities, the only one that can ensure spiritual growth without end and the perfection of human person through its union with Christ, on the other hand. At the same time, on several occasions, we used the theological method, through which we rendered various opinions of contemporary theologians from the three branches of Christianity - Orthodox, Catholic and Protestant. Finally, we must also mention the use of the historical method, especially in the case the chapter dedicated to the meeting between (proto)transhumanism and the Christian tradition.

The current state of research

In Orthodox literature, the subject of transhumanism received developments only recently, and this one fact is not accidental: since technological progress is taking place in the greatest measure in the Western space, Western theology, in both guises – Catholic or Protestant, provided the first analysis of transhumanist anthropological and philosophical claims. Thus, it is not surprising that the first monography from the Orthodox theology was offered to the public by a theologian from the Western space, the French priest and doctor with Romanian origins Jean Boboc. His volume, *Transumanismul decriptat. Metamorfoza navei lui Tezeu*, published in Romanian translation in 2020, summarizes the results of his extensive project of anthropological research, initiated in response to the many challenges that medicine and contemporary sciences propose to the traditional Christian vision of the human. In his approach, Father Boboc had to respond to multiple objections from the part of the contemporary scientific discourse, probably the most representative regarding the Creator's absolute control over the beginning and the end of life. Both doctor and scientist, the theologian Jean Boboc did not take an anti-scientific position, but, on the contrary, his work showed that faith and science can collaborate for the recognition of the dignity and the vocation of the human and to fulfill in communion with the Creator God. His approach its meritorious and, at the same time, fundamental and paradigmatic for any other theological research future in this field.

Another important contribution to the knowledge of the transhumanist phenomenon was recently made by Adrian Lemeni through the volume *Tehnicizarea inumană a vieții*. In the fourth part of this volume, entitled "Transhumanism - the utopia of technological religion", the author analyzes the ideological and philosophical roots of transhumanism, the relationship between transhumanism and technology, as well as the religious dimension of transhumanism. In this volume are presented significant milestones regarding the risk of an inhuman technicalization of human life, the vulnerabilities generated when this excessive technicization presupposes a loss of profound humanity, a damage to the identity and dignity of the man, sealed by the image of God. The pages of the volume reflect the author's effort to understand the nature and the implications of today's technological environments, an approach through which the utopias proposed today by transhumanism and posthumanism could be noticed. The author has eloquently shown that as society is becoming more and more technical, the man, in order to survive, has to resemble himself a lot to the machine, living more in the artificial environment of technology, than in the reality given by God.

We also mention Ana Veronica Ion's book, published under the title *Transumanismul – un comentariu creştin*, a useful study of the transhumanist thought, analyzed through the prism of Christian thought. The volume provides a brief history of transhumanism and a useful introduction to the most significant themes and development directions of transhumanism: enhancing intellectual capabilities, connecting the brain to sources of information, Artificial Intelligence, genetic engineering, technological singularity, assisted reproduction, ectogenesis etc. The author shows the fact that the evolution of technology, briefly described, has largely changed the human mind, individually and collectively. Human pride, fueled by the otherwise remarkable results of the technological effort, estranged the man from God, giving him the feeling that he can exist independent of God. On the other hand, even more disturbingly, the man began to admire technology, seeing it as a source of safety, and wanting to be like the machines, his own creations.

The anthropologist and sociologist Nicu Gavriluță offers his own analysis in the volume *Noile religii seculare: corectitudinea politică, tehnologiile viitorului şi transumanismul*. In the last chapter of the book, called "Transhumanism - the secular cult of Homo deus", the author presents mythological phantasms and ancient religious nostalgia camouflaged in transhumanism (e.g. those of ageless youth or immortality) or the dangers it poses: such as the dehumanization of the population, the perfect control of the man, the possible replacement of the man with the machine, genetic altering, and most of all, the usurpation of the biblical God and installation on the vacant throne of posthuman hybrid type entities, the "gods" of the posthuman future, the only ones who would overcome the human condition with the help of technology. In the opinion of the author, immanentizing the Absolute, disguising the sacred in the profane and taking over many of the

classical data of the great religions, transhumanism is an upside-down, secular religion, the current cult of the superman, where the supreme divinity of Judeo-Christianity becomes inconvenient and is abandoned.

We also mention the book *Anthropos-Omul: Paradigmele unui model antropologic integral*, written by Alexandru Buzalic. It contains the chapter entitled "Transhumanism, where to?", in which the author analyzes, among other things, the philosophical and theological language of transhumanism and its ultimate aspiration, terrestrial immortality. The author shows how the coevolution of man and technological civilization opens a new direction of development that reaches the entirety of the human phenomenon. Transhumanism wants to be more than a doctrine of the improvement of man, being a manifestation of nihilism by abolishing the values of universal humanist culture.

An important contribution to the current state of research in the Romanian language is Maria Sinaci's book *Bioetica şi ameliorarea umană. O perspectivă filosofică*. In this volume, the author presents, in the first part, a theoretical debate for conceptual clarification regarding the term bioethics, the acceptance of this term in contemporary discussions and analysis from a philosophical perspective or the concept of human improvement and its multiple approaches, and, in the second part, is offered an applied bioethics approach, aiming at the contemporary debates regarding cognitive or moral enhancement and ethical discussions in the new framework of neuroscience and human enhancement processes.

Finally, we mention some collective volumes from the Anglo-Saxon space, in particular relevant to our work, namely those coordinated by Ronald Cole-Turner, by Calvin Mercer and Tracy Trothen and by Hava Tirosh-Samuelson and Kenneth Mossman. We are also obliged to mention the research of some orthodox theologians from the West, namely the ones published by David Bentley Hart, Eugene Clay, Brandon Gallaher and Jean-Claude Larchet, indispensable for a profound knowledge of the phenomenon.

Limits of research

One of the limits of the present research is the lack of an analysis of gender theory and transgender ideology, with its multiple cultural, social and medical implications. The first wave of transhumanist ideology has already shaken society to its core, along with the explosive growth of support for transgenderism. Faithful to transhumanist "dogma", gender ideologues insist that transition is a fundamental right, which the whole society must ensure. The issue of gender has become in the last decades one of the main debates of the our era, both due to philosophical developments and societal consequences. Although designed to be part of our research, the preliminary analysis showed us the fact that the subject proposes a great extent, which, far

exceeding the dimensions of the present doctoral thesis, could have received only a summary presentation, which we considered inappropriate.

Also, another limitation of the work is the permanent use of foreign bibliographic resources, heterodox and non-theological. This practice is due to the fact that the various branches of transhumanism rely almost entirely on discoveries as a result of scientific experiments in the life sciences and advances in information sciences. Even though the religious dimension of transhumanism is already recognized and many thinkers argue that it should be regarded as a secular religion, because it secularizes traditional religious themes, concerns, and goals, transhumanism endows at the same time technology with a religious meaning. Thus, we consider science-religion cross-sectional studies provide the most appropriate context to explore the cultural significance of transhumanism. In these conditions, we had to turn to the research of numerous nontheological sources and to follow the thread of transhumanist discourse, which expresses the ideals and feelings of the scientific and technological community, while trying to place in counterbalance the coordinates of orthodox anthropology.