VILNIUS UNIVERSITY

Marius
MARKUCKAS

The idea of transhumanism from the perspective of historical ontology

This dissertation was written between 2012 and 2021 at Vilnius University.

Academic supervisor:

Prof. Dr. Vytautas Radžvilas (Vilnius University, Humanities, Philosophy – H 001).

Academic consultant:

Prof. Dr. Alvydas Jokubaitis (Vilnius University, Humanities, Philosophy – H 001).

This doctoral dissertation will be defended in a public meeting of the Dissertation Defence Panel:

Chairman – **Prof. Dr. Albinas Plėšnys** (Vilnius University, Humanities, Philosophy – H 001).

Members:

Assoc. Prof. Dr. Mintautas Gutauskas (Vilnius University, Humanities, Philosophy – H 001);

Prof. Dr. Naglis Kardelis (Vilnius University, Humanities, Philosophy – H 001);

Prof. Dr. John F. X. Knasas (University of St. Thomas, USA, Humanities, Philosophy – H 001);

Prof. Dr. Gintautas Mažeikis (Vytautas Magnus University, Humanities, Philosophy – H 001).

The dissertation shall be defended at a public meeting of the Dissertation Defence Panel at 5 pm on 18 February 2022 in meeting room 201 of the Faculty of Philosophy, Vilnius University.

Address: 9 Universiteto St., Room No. 201, Vilnius, Lithuania

Phone No.: +370 5 266 7600; email: fsf@fsf.vu.lt

The text of this dissertation can be accessed through the library of Vilnius University as well as on the website of Vilnius University:

www.vu.lt/lt/naujienos/ivykiu-kalendorius

VILNIAUS UNIVERSITAS

Marius
MARKUCKAS

Transhumanizmo idėja istorinės ontologijos perspektyvoje

Disertacija rengta 2012 – 2021 metais Vilniaus universitete.

Mokslinis vadovas:

prof. dr. Vytautas Radžvilas (Vilniaus universitetas, humanitariniai mokslai, filosofija – H 001).

Mokslinis konsultantas:

prof. dr. Alvydas Jokubaitis (Vilniaus universitetas, humanitariniai mokslai, filosofija – H 001).

Gynimo taryba:

Pirmininkas – **prof. dr. Albinas Plėšnys** (Vilniaus universitetas, humanitariniai mokslai, filosofija – H 001).

Nariai:

doc. dr. Mintautas Gutauskas (Vilniaus universitetas, humanitariniai mokslai, filosofija – H 001);

prof. dr. Naglis Kardelis (Vilniaus universitetas, humanitariniai mokslai, filosofija – H 001);

prof. dr. John F. X. Knasas (Šv. Tomo universitetas, JAV, humanitariniai mokslai, filosofija – H 001);

prof. dr. Gintautas Mažeikis (Vytauto Didžiojo universitetas, humanitariniai mokslai, filosofija – H 001).

Disertacija ginama viešame Gynimo tarybos posėdyje 2022 m. vasario mėn. 18 d. 17 val. Vilniaus universiteto Filosofijos fakulteto 201 auditorijoje. Adresas: Universiteto g. 9, 201 auditorija, Vilnius, Lietuva, tel. +370 5 266 7600; el. paštas fsf@fsf.vu.lt.

Disertaciją galima peržiūrėti Vilniaus universiteto bibliotekoje ir VU interneto svetainėje adresu: *www.vu.lt/lt/naujienos/ivykiu-kalendorius*

SUMMARY

Theoretical and practical relevance of the research. As soon as the twentieth century reached its second half, the famous English scientist Julian Huxley raised the idea of transhumanism, which hopefully proclaimed that it is possible to understand the nature of the human being and its possibilities and, at the same time, to improve the human being and the whole of humanity with the help of scientific knowledge. This hope is also clearly seen in the presentations of transhumanism in our day, which, based on scientific and technological knowledge, also refers to a comprehensive – physical, mental, moral – "enhancement" of an existing human or even radical "remake" of the human into a much more "advanced" new kind of being [1] . Today the idea of transhumanism is accompanied by intensive considerations as to whether it can actually be turned into a project that could be implemented and, if so, how it should be realized in reality. The intensification of such considerations is best illustrated by the fact that transhumanism is receiving increasing scientific attention,

---

[1] It should be noted that transhumanism research contains concepts that are highly value-laden and loosely defined, such as "human improvement", "human enhancement", "perfecting the human state", "cutting-edge scientific knowledge". According to the author of this dissertation, a stricter definition of such concepts is complicated by the specifics of transhumanist thinking itself, which is based on the anti-essentialist conception of the reality and human. In the absence of any stable criteria for assessing "perfection", "improvement" or "progress", a fixed definition of these concepts becomes virtually impossible. This dissertation did not attempt to define these concepts, so they were used here only to demonstrate the uncertainty and value-laden character of the prevailing transhumanist discourse. It should be noted that such valuative concepts are most often used in works that aim to convince the reader of the validity and usefulness of the transhumanism project. It is therefore why these concepts can be treated not only as value-laden, but also as ideological.

specialized academic research centers are being established to study its ideas and practices, and the literature analysing it is so vast that it becomes difficult to cover.

The growing relevance and interest in the phenomenon of transhumanism is explained by the fact that the scientific and technological potential of reality and human transformation, already perceived by Huxley in his time, has become increasingly accessible, thus fortifying the theoretical and practical positions of transhumanism. According to the proponents of transhumanism, cutting-edge scientific and technological discoveries (cybernetics, robotics, genetics, medicine, biochemistry, biotechnology, nanotechnology, cognitive sciences, information technology and other fields) can be successfully applied in the process of "perfecting" the human being. This growing hope of transhumanism, present not only in academic circles but in broader social contexts as well, is evidenced by the increasing intellectual, cultural, social, and political movements that seek to maximize a wider understanding of transhumanist ideas and practices as well as possibilities of applying them in contemporary societies.

On the other hand, even recognizing the fact that the idea of transhumanism is really gaining popularity and the belief in its feasibility is growing, it should be noted that transhumanism itself is more perceived as a phenomenon of the future rather than the present, or as an event that is still being prepared or is likely to occur. The academic work on the analysis of the phenomenon of transhumanism makes an important contribution to such a treatment of transhumanism. Many of these works are characterized by what could be referred to as "visionism" in the general sense. This means that they do not focus on the analysis of the current situation, reflecting on the human state and its relationship with scientific knowledge and technology; instead these studies attempt to predict what physical, cognitive, moral, or emotional qualities could or should characterize the "new", technologically "supplemented" or

radically "altered" human (transhuman or posthuman [2]). Such a visionism in itself seems to create the impression that the convergence of human and science-based technologies is still absent or is only in its early stages of development; therefore, transhumanist ideas cannot yet be put into practice or can only have little impact on human beings and contemporary societies.

This dissertation shows that such an impression is not correct. The latest scientific knowledge and technologies, even if their potential is still not fully understood and realized from the perspective of the transhumanism project, should be reasonably regarded as the most important factors that "shape" the modern human, deciding self-comprehension and behaviour as well as influencing the structures of modern societies. Moreover, scientific knowledge and technological opportunities have already reached a threshold where, in principle, it has become possible to conduct even the most grandiose of transhumanist practices, such as genetically modifying individual human parameters, growing human organs from the individual's own stem cells, or even cloning the human being themselves. Experiments on humans at this level are still very limited and some are even prohibited. Therefore, although in principle there are already preconditions for the realization of transhumanist ideas, it would be too early and too bold to claim that these ideas are being implemented. So far, the transhumanist project exists more as a theoretical possibility, but at the same time it can be

---

[2] The terms "transhuman" and "posthuman" are understood and used in this dissertation in the same way as in most texts on transhumanism, where the term "transhuman" usually refers to a technologically "enhanced" human being, and in turn the term "posthuman" is intended to denote a hypothetical entity of the future – a radically technologically "transformed" human, where the radicality of a "remake" does not in fact mean an "improvement" of the "old" human species, but the future creation of a being that transcends all hitherto known and attributed to the human being anthropological forms (physical, mental, etc.) by means of such "improvement" practices.

treated as having the technological potential to be widely implemented. It is its realness that necessitates a deeper understanding of transhumanism.

Research on transhumanism is widespread indeed, but there is a clear gap in the academic literature devoted to the study of the "phenomenological" aspects of the transhumanism project and the philosophical aspects of the project itself. Most of the research on transhumanism is devoted to the "technical" problems associated with the transhumanism project and its practical implementation, leaving aside the much more fundamental philosophical inquiry into the "nature" of transhumanism – or its essence and meaning. The predominant research on transhumanism covers a wide range of its aspects, including techno-(bio)-engineering (Tegmark 2019; Bostrom 2017; Kurzweil 2000; Moravec 1990), sociopolitical and economic aspects (Harari 2018; Fukuyama 2002), religion (Anderson 2020; Mercer, Trothen 2014; Mercer, Maher 2014), ethics and morality (Habermas 2014; Person, Savulescu 2010; Bostrom 2005a), as well as aesthetics (Starr 2019; Vita-More 2013). However, all these studies do not provide a theoretically convincing and, for many researchers, acceptable answer to the key question: what is transhumanism? This fundamental problem of the conceptualization of transhumanism is clearly evidenced by the fact that there are many definitions of this phenomenon. Some researchers even tend to state that the concept of "transhumanism" cannot in principle be strictly theoretically defined, since it is constituted by too varied trends of thinking and the practical aspirations that embody these trends (Ferrando 2013).

This gap in the knowledge of the phenomenon of transhumanism is not only due to the fact that there is no consensus on the nature of this phenomenon, but also that the field of transhumanism studies is value-laden. Most of the current research on transhumanism has a strong influence of value-laden, radically opposite assessments of transhumanism, which are obviously embodied and ideologically purified as well as structured by the

famous separation between transhumanists and bioconservators [3]. Transhumanism apologists and the critics of the concept debate whether transhumanism should be seen as an unprecedented opportunity for humanity or, conversely, as an existential threat to it. The advantages or disadvantages of the anthropological, social, political, economic, cultural transformations caused by transhumanist ideas and practices are becoming an impetus and a point of reference in trying to justify one or another assessment of the phenomenon of transhumanism. While such discussions may seem theoretical, they do little to help conceptualize transhumanism, i. e., they do not help in any way to reveal and define more strictly the very essence of the idea, and at the same time to answer more clearly and precisely the question of the epistemic assumptions and status of the transhumanism project and the conditions, possibilities, and ontological limits of its implementation. In general, the pre-assignment of various ideological and value contents to transhumanism in this field of research creates the impression of theoretical chaos. This in turn justifies the doubt on the existence of a unified discourse on transhumanism and, accordingly, provides a basis for the scepticism regarding the possibility to conceive transhumanism objectively[4].

---

[3] The most famous representatives of the transhumanism camp are Max More, Natasha Vita-More, Ben Goertzel, James Hughes, Zoltan Istvan, Ray Kurzweil, and Nick Bostrom. Francis Fukuyama, Jürgen Haberm, Leon Kass, and Michael J. Sandel are the most prominent bioconservators in their own right.

[4] This dissertation is based on the premise that despite the internal theoretical and practical diversity that constitutes transhumanism, it is reasonable to treat transhumanist discourse as a unified whole and to represent transhumanism as a "project". The factors guaranteeing the conceptual and practical "integrity" of transhumanism are presented in detail in the dissertation itself. It is sufficient to note in this summary that all transhumanist ideas and practices are directed towards the elimination of limitations of the human as an entity, following the common belief that the elimination of human "limitations" is simultaneously the "improvement" of

This dissertation is based on the premise that the above doubts and even skepticism do not deny that, in principle, it is possible to analyse transhumanism objectively. This study is grounded on the assumption that there exists a certain set of core principles recognized by all or at least most transhumanists, which in turn makes it possible to reconstruct a sufficiently representative picture of the idea of transhumanism that acquires the outlines and status of a fairly well-defined research object. Efforts are made in this dissertation to elucidate and refer the basic conceptual assumptions and attitudes that enabled the formation of transhumanist thinking and determined its development, in order to highlight and define the conceptual core that constitutes and structures transhumanism.

In order to discover these fundamental ideas defining transhumanism, it is not enough to be guided solely by a scientific cognition of transhumanism and empirical research focused on describing its features, which often reveals the idea that, since human beings have always been concerned with extending the limits of their natural possibilities, it is as if it were self-evident that the phenomenon of transhumanism is a long-term one and therefore should not, or even in principle, be associated with any particular historical epoch or paradigm of philosophical thinking. For example, James Hughes (2012), in expressing such an approach, argues that transhumanism only modernly expresses the old transcultural aspirations to radically transform the spheres of both bodily and social human existence. The possibility of treating transhumanist

---

the human being – or even its transformation into an entity of greater perfection. This suggests that although not all transhumanist considerations can be traced to the concepts of "transhuman" or "posthuman", practically, all these considerations embody the idea that the natural human ontological limitations and anthropological form can be substantially "altered" or "transcended". This provides a basis for asserting that various transhumanist considerations and attempts to realize them in practice can be combined into a unified project, the essential goal of which is the creation of the "transhuman" or "posthuman".

thinking as a historical and transcultural phenomenon has been alluded to by other prominent researchers and representatives of transhumanism, such as Nick Bostrom (2005b) and Natasha Vita-More (2019), who have had a tremendous influence on the perception of modern transhumanism in both academia and society at large.

On the other hand, even in recognizing the superficial similarity between the ancient wish to increase or extend human powers and the desire of contemporary transhumanism to fully "improve" or "free" a human being, both from the limitations of human's own nature and from the "external" limitations of nature itself, this dissertation questions the validity of the "ahistorical" approach to transhumanism. It is demonstrated in this study that there are fundamental theoretical challenges in reconciling modern transhumanist thinking with metaphysical thinking based on the traditional concept of reality. More specifically, this concerns anthropology: it is impossible to reconcile essentialist thinking that prevailed in pre-modern philosophical thought and a radically anti-essentialist treatment of the human that underpins the philosophy of transhumanism. This doubt is reinforced by the fact that both researchers of transhumanism and transhumanists themselves, despite various theoretical attempts to distance the phenomenon of transhumanism from specific sociohistorical and intellectual conditions, tend to agree that it is still expedient to look for the origins of modern transhumanism by delving into the specifics of modern philosophical thinking and, in particular, the philosophical ideas about the human and reality that eventually formed and unfolded in the Enlightenment era.

The development of modern anthropocentrism, which, as is explicated in this dissertation, is closely related to the possibilities of "representation" and "governing" of reality provided by modern science, has established the cultural context of modernity defining the "secular belief" that it is possible to fundamentally "improve" a human being and the natural and social environment surrounding them with the assistance of human reason and effort. This

dissertation questions the project of transhumanism that conceptually and practically embodies this "secular belief", both with the traditional concept of reality, emerging from the paradigm of classical philosophy, and theocentric structured religious thinking. It also inquires whether attempts to represent transhumanism through the prism of religious thinking and its motives, as some transhumanist researchers tend to do, adequately reveals the essence of the transhumanism phenomenon and whether it is theoretically purposeful; or maybe this phenomenon should be presented and approached from a different perspective than the religious cognitive one and, in particular, the cultural and intellectual positions of the modern epoch. Searching for the answer to the issue raised above, as the analytical tool of the basic structure of transhumanist thinking the concept of "ideology" is employed, which emerged in the modern epoch and which adequately responds to the concept of "secular belief".

The question of the anthropological consequences of modernity is not a new one. Already in the 19th century it was clearly raised in the works by Friedrich Nietzsche and widely analysed by transhumanist scholars as an alternative to the two following perspectives: the destiny of the world of the near future, according to Nietzsche, to be the epoch of either the Overman or the Last Man. Nietzsche's conception and formulation of human "self-creation" in modern philosophy was radicalized and revealed in postmodern conditions, which, by completing the process of the "deconstruction" of the traditionally understood human as an entity having a metaphysical nature, and by institutionalizing the constructivist potential inherent in modern philosophy, has finally established the concept of the human as a biosocial artifact.

Such a radically constructivist approach to man underpins the belief in transhumanist thinking that the source of a wide range of human limitations – or human nature itself – can be successfully "reworked" or even "overcome" by evolving scientific and technological knowledge that would create the preconditions for a conceptual jump into a posthuman condition that is ontologically and

qualitatively different. The author of this dissertation relies on the classical concept of the human as an immutable entity which is sufficient for the purposes of this research, according to which human beings possess a metaphysical nature – a set of essential qualities and characteristics that constitute humanness. These qualities and traits have been variously called by different thinkers. However, they all had in common the basic tenet that unites all philosophical anthropological concepts of this type – that there exists a timeless and immutable essence or nature in the human, which is at the same time the ultimate and insurmountable limit to the realization of human potential. The aforementioned transhumanist belief is theoretically analysed and critically assessed from the perspective of the concept of such a human nature[5]. The transhumanist belief that it is possible to transcend human nature stems from an overly optimistic or even naive attitude that ignores the empirical spatial and temporal definiteness and finitude of the human as an entity and the consequent limitation of human knowledge, which, in the philosophy of antiquity and the Christian philosophy of the medieval period, was considered one of the essential factors that ontologically separate man from God.

In order to reveal the fallacy of this transhumanist belief in detail and, at the same time, to seek an answer to the question of what transhumanism is, some insights from social philosophy and the philosophy of science on scientific and expert knowledge for reflexively constructing reality are used. Specifically, the theoretical and methodological approach of historical ontology, developed by philosopher and historian of science Ian Hacking, is chosen as an

---

[5] This dissertation deals with the epistemological and ontological aspects of transhumanism. At the same time, it should be noted that the research in this dissertation is conceived as a theoretical-critical analysis of the idea of transhumanism. Therefore, it also – albeit implicitly – addresses the ethical issue of transhumanism, which, due to the limited scope of this work, could not be analysed in more detail and should become the subject of a separate in-depth study.

analytical tool for the search of limits in scientific knowledge and transhumanism. Historical ontology is not the first approach to emphasize the changing (historical) nature of scientific knowledge. In essence, it is an epistemological tool that makes it possible to understand how and what scientific knowledge changes people's behavior and self-perception. A fundamental feature that distinguishes historical ontology from other approaches to the philosophy of science is the principle that scientific knowledge changes a person's self-perception and understanding of natural processes and can therefore change their behaviour, thus creating new social phenomena. From the point of view of historical ontology, the development of scientific knowledge is also a process of generating phenomena that acquires an ontological dimension, as not only new species of natural and social entities emerge, but also their ontological status or understanding and evaluation are altered. The work of I. Hacking focuses on the analysis of the construction of human species using scientific and technological knowledge. Due to this feature, the historical ontology examining the epistemological and ontological status of humans can be successfully applied to the idea of transhumanism, which presupposes a radical ontological transformation of the human being, and is therefore used as the main tool for the theoretical analysis of this idea.

Research object: the idea of transhumanism.

Research problem: theoretical and practical validity of the idea of transhumanism in the perspective of historical ontology.

Research aim: to reconstruct the principles of transhumanism and their epistemological and ontological implications using the method of historical ontology and, on the basis of this reconstruction, to assess whether the principles of transhumanism make it a feasible/ultimate goal-achieving programme.

Research tasks:

1. To explicate the origins of transhumanist thinking in philosophical anthropology of the Enlightenment, as well as examine its links and relation to ideological thinking, revealing the general features that bind these types of thinking;
2. To discuss the cultural and conceptual assumptions that have led to the emergence and establishment of scientific knowledge as an essential reality-defining and ontologically structuring power, as well as to reveal the relationship of transhumanism with the scientistic conception of presence and biopolitics;

3. To explicate the conceptual origins of Hacking's historical ontology within Foucault's genealogy and assess the feasibility of historical ontology as a historicized genealogical method and modified methodological tool for the analysis of the idea of transhumanism.

4. To analyse the historical approach to the production and functioning of modern and expert knowledge developed in Hacking's historical ontology and, based on this analysis, to assess the theoretical and practical validity of the idea of transhumanism as a project of transcending human ontological limits.

Research thesis and statements to be proven. In this dissertation, the following thesis is argued: transhumanism, which in the general sense can be understood and defined as an effort, based on the development of scientific and technological knowledge, to overcome natural human limitations and to transcend the ontological limits of the human being, approaching from a historical ontology perspective, reveals as an internally contradictory and self-negating project.

In arguing the validity of this thesis, in this dissertation the following statements are defended:

1. Historical ontology, which examines the impact of scientific and expert knowledge on social attitudes towards the individual and their status, as well as on the individual's self-perception and behaviour, is an appropriate methodological tool for analysing the influence of science and technology on various aspects of economic, social, political, and cultural changes in contemporary society and the process of a changing personal identity related to the latter;

2. Historical ontology reveals the connections between (1) evolving scientific-expert knowledge, (2) alterations in the perception of the ontological status of biological and social phenomena promoted by that knowledge, and (3) changes in individual identity influenced by the aforementioned. The study of these interactions through historical ontology not only makes it a suitable method for analysing individual aspects of human existence of interest to transhumanism, but also opens the possibility of using the perspective of this philosophy of science to examine the very idea of transhumanism, which is concerned with attempts to transcend ontological limitations and alter the natural properties of the human being by means of science and technology;

3. By revealing the dependence of the concept of the human on historically evolving scientific knowledge and the ontological "rootedness" of the human as an entity in historical time, historical ontology simultaneously reveals the transgressive nature of the idea of transhumanism and its internal contradictoriness. This is expressed as an insurmountable epistemological and ontological conflict between (1) the process of infinite transcendence of the

human unfolding in time, and (2) the declared desire to complete this historical process with a transition to a qualitatively new transhistorical state, in which its historicity, testified to the ontological limitations of human existence, is abolished.

Research method. The main object of critique in this dissertation is a provision inherent in the works of the representatives of transhumanism: that by developing scientific and technological knowledge and applying it to the elimination of natural human limitations (physical, mental, psychological, moral), the ontological transcendence of the human and the creation of an ontologically new being, the so-called "posthuman", is possible. This attitude, which constitutes transhumanist thinking, is especially evident in the works of such eminent theorists of transhumanism as Max More and Nick Bostrom, who laid the foundations for the formation and development of the project of transhumanism by philosophically grounding and developing its conceptual foundation. For this reason, the dissertation analyses in detail and criticizes the concepts of transhumanism and the posthuman state expounded in the works of these philosophers. An essential analysis of the theoretical and practical validity of these concepts and their critique is carried out using the theoretical and methodological insights of Ian Hacking's historical ontology on the dependence of human existence on scientific knowledge and its historical change. In proving the contradictoriness of transhumanism in the perspective of historical ontology, Hacking's insights are supplemented and reinforced by the insights of other authors, such as Thomas D. Philbeck, Yon Van Den Eede, and Susan B. Levin, revealing the problematic ontological nature of transhumanism.

Scientific novelty of the research. Although the potential of historical ontology as an analytical tool in reflecting on the posthumanist trends in the modern world and the philosophical anthropology of the 21st century has already been seen in the work of

some authors (see, for example, De Vleminck 2016), there is still no research where historical ontology is applied specifically to the study of transhumanism. This dissertation, where the epistemic and ontological status of the idea of transhumanism and the theoretical and practical validity of the human transcending project based on this idea are analysed using historical ontology as a methodological tool, is considered an original and new contribution to the research on transhumanism.

Overview of the descriptive part of the research. The first chapter of the dissertation discusses the ideological-historical origins of transhumanism. It reviews and critically evaluates the efforts of transhumanists to construct an aura of an old theoretical tradition that should give their thinking a genealogy of the idea of transhumanism. It is demonstrated why attempts to trace the origins of transhumanism in pre-modern thought cannot be fruitful, and why transhumanism is to be regarded as a purely modern idea that began to unfold in its full force in the philosophical thought of the Enlightenment. On the one hand, the philosophy of the Enlightenment is presented as a particularly important element of the conceptual identity of transhumanism; however, the role of Enlightenment philosophy, and more specifically the conceptual understanding of the human being, is demonstrated as a source of internal contradictoriness. This chapter also raises the questions of whether the contradictoriness of transhumanism calls into question the image of transhumanism as a systematic techno-scientific programme, largely shaped by the transhumanists' own efforts, and whether it provides a basis for claiming that transhumanism can be understood as an ideologically-oriented anthropological engineering project.

The second chapter of the dissertation aims to define and assess the theoretical status of transhumanism and, since it is possible to do so only indirectly, i. e., only after having reconstructed the conceptual assumptions and attitudes of transhumanism, this chapter discusses in detail the relationship between transhumanist

and ideological thinking, the assumptions of the "structural" closeness of these types of thinking, and their general features. The origins of the idea of transhumanism in the scientific conception of science and existence and its connections with the ideas of modern biopolitics and their practical aspirations are also examined. The connections between (post)modern science as the "founding" power of reality and its inherent "politicization" with ideological and transhumanist thinking are examined in detail. Through the analysis of the posthuman state as postulated by transhumanism, the factors that allow transhumanism to be distinguished from other modern ideologies and treated as a radical current of scientistic ideological thinking are revealed.

The third chapter of the dissertation presents the main methodological tool for the analysis of the idea of transhumanism – historical ontology. As the idea of transhumanism is based on the hopes associated with scientific and technological knowledge, a methodological approach is best suited to examine and assess it, allowing a systematic reflection on the development of modern scientific and expert knowledge and the perspectives of its development. This chapter illustrates that the genealogical method developed by Foucault has become an effective tool for such analysis, allowing both to highlight the historical nature of knowledge and to reveal the connections between knowledge and power. The idea of transhumanism presupposes the prospect of a radical transformation of the present human. Therefore, the method of historical ontology developed by Hacking and widely used in his research better explains the historical and perspective nature of this idea for its analysis. A comparative analysis of Foucault's genealogy and Hacking's historical ontology in the chapter reveals the essential advantages of Hacking's methodological position in exploring the idea of transhumanism. Hacking's historical ontology is demonstrated as allowing for a more nuanced reflection of the fundamental category of "power" in (post)modern reality than Foucault's genealogy does. Historical ontology also enables, better than Foucault's genealogy, to reveal the assumptions of a valuative

"neutralization" and ethical "aestheticization" of the category of "power" through scientific and expert knowledge, which grounds social and anthropological engineering, representative example of which is transhumanism.

In the fourth chapter of the dissertation, the ontological dimension of the reality "established" by scientific and technological knowledge, which, in its turn, enables the project of transhumanism, is revealed from the view of historical ontology. Through the analysis of this knowledge, which "opens up" the "limitations" of the human being (using obesity, genetic risk factors for cancer, and cognitive biases as study objects), the historical variability and ontological fluidity of the knowledge itself and of the understanding of reality and the human being, constructed based on this knowledge, is demonstrated. This chapter also goes back to the idea raised in the first chapter on the contradictoriness of transhumanism and the principal impossibility for transhumanism to take the strict form of a technoscience programme. Considering the specifics of the production and development of modern scientific and technological knowledge, as well as the analysis of its ontological and anthropological influence, the logical content of the idea of transhumanism (focusing on the critique of the works of Bostrom and More) is analysed, and the view that transhumanism is an inherently contradictory project is justified in detail.

Conclusions. The study conducted in this dissertation allows to state the following:

1. Despite the existence of external similarities between ancient aspirations of acquiring more power for the human being, becoming less vulnerable, more perfect, etc., and contemporary transhumanism, which postulates that it is possible to transcend human physical and mental limits through scientific knowledge and technological possibilities, any theoretical attempts to trace the origins of transhumanism in pre-modern cultural, religious, or philosophical thought

cannot be fruitful. This is because transhumanist thinking is essentially incompatible with classical metaphysically-oriented thinking. In the classical paradigm of thinking, a human being is understood as an integral part of hierarchically structured being, which is not determined and absolutely controlled by the human's own will. In modern times, transhumanist thinking is characterized by an increasingly intellectual and cultural inclination to deny the hierarchical conception of being, emphasizing the creative omnipotence of humans over reality and the perspective of the "divinization" of the human being based on that omnipotence.

2. The anti-essentialist and processualist conception of the human, which transhumanism inherited from the philosophy of the Enlightenment, is to be treated not only as a source of the idea of transhumanism, but also as a source of its internal contradictoriness. On the one hand, the refusal to think about a human as an entity limited by natural parameters is a fundamental provision that underpins the whole project of transhumanism – both as a conceptual and as a practical one. On the other hand, such a renunciation, which re-enforces the human concept of transhumanism, according to which the human being is only a biosocial and cultural artifact that constantly evolves based on the changing scientific knowledge and technological possibilities, eliminates the object and aim of transhumanism, i. e., denies the existence of ontologically defined and stable human boundaries, which, as a point of reference, would make it possible to define the human being as specific entity and simultaneously enable the fact of human transcendence to be fixated.

3. The refusal to think of the human as an ontologically defined entity with objective cognitive parameters denies the possibility of strictly demarcating transhumanism as a

technoscientific research programme and stating its aims in a theoretically consistent and clear way. The theoretically undefined idea of transhumanism is to be considered a value-laden attitude that presupposes the imperfection of the existing human and the need to improve it. An essential factor in support of this view is the belief of transhumanists in the unlimited advancement of scientific knowledge and technological possibilities. Based on this belief, the opportunities offered by the increasing scientific knowledge and evolving technology provide the hope of revealing and at the same time overcoming what is considered to be new human limitations. Therefore, the idea of transhumanism, perceived in terms of its practical feasibility, can be considered as an ideological project of anthropological engineering.

4. The ideological nature of transhumanist thinking is conditioned by its inherent notion that reality is a projection and result of human creative power. A specific feature of ideological thinking is the belief based on the scientistic image of the omnipotence of modern science as a form of knowledge that "establishes" reality, that reality can be substantially reworked or completely mastered by human will. Transhumanist thinking is a specific form of the secular scientistic belief postulating that with the assistance of science, it is possible to transcend all the limits of nature, both inherent in the human being and externally effecting in respect of the human being. Such a belief, which is characteristic of many modern ideologies, acquires the most consistent and radical expression in transhumanism. This provides a basis for considering it as a radical variant of scientistic ideology, or one that is fully aware of its constructivist nature.

5. Foucault's views had a great influence on the formation of historical ontology, the method of research of social reality developed by Ian Hacking. A comparative analysis of Hacking's historical ontology and Foucault's genealogy, however, revealed that there are significant differences between the views of these thinkers on history as a field for constructing social reality and the mode of its existence. The recognition of "language-games" rather than "power games" as a mechanism for constituting social reality in historical ontology has allowed Hacking to reveal more deeply the anti-essentialist nature of such a reality as a "non-existent existence", or "marked" as a purely linguistic existence. Orientation to the analysis of the impact of scientific, technological, and expert language, enabled Hacking to explicate this "constitutive" power of such a language in relation to the human and reality. It also helped reveal the constructive and nihilist nature of postmodern ethics as well as grasp the premises of the valuative "neutralization" and ethical "aestheticization" of modern social and anthropological engineering, realized through scientific knowledge and the most representative example of which is transhumanism.

6. Hacking's historical ontological research into the genesis of scientific-expert knowledge reveals the connections and interactions between the change in the perception of the ontological status of biological and social phenomena promoted by this knowledge and the changes in individual identity caused by that change. The study of these interactions through historical ontology makes it a suitable method for analysing these changes, which are grounded in scientific and technological progress, in aspects of human existence and biosocial properties, which are of interest to transhumanism. It also allows to apply historical ontology to study the idea of transhumanism itself, which postulates an effort to overcome

the existing ontological limitations of the human being by altering their natural qualities.

7. By revealing the dependence of the human conception on historically changing scientific knowledge, historical ontology enables to reveal the transgressive nature of the idea of transhumanism and its internal contradictoriness. This contradictoriness can be observed in the works of transhumanists in the form of an insurmountable epistemological and ontological conflict between the process of unlimited transcending of the human in historical time and the declared effort to end this historical process by transitioning to a qualitatively new transhistorical state in which its historicity, testified to the ontological limitation of human existence, is abolished. These changes, enabled by the development of scientific knowledge and technological capabilities, in the conception of the human being, and more specifically, in its ontological qualities and limits, provide the basis for the fundamental object of transhumanist research – the human – to be conceptualized, using a term introduced by Hacking into the philosophy of science to describe the ontological character of human kinds, as a perpetually "moving target".

8. The theoretical and methodological perspective of historical ontology reveals that the ontological "liquidity" of a human being as a cognitive object determined by scientific and technological change (or, from the perspective of transhumanist thinking, progress), is the main reason for conceptualizing the project of transhumanism as inherently contradictory. New scientific and technological discoveries, on which the practical implementation of this idea must be based, shift the previous knowledge on the human being, its ontological parameters and, at the same time, human limitations, which redefines the boundaries and aims of the

transhumanist project. The constant change of the boundaries and aims of transhumanism enables it to be treated as a nihilistic project with virtually no clear contours, the only tangible function of which can be considered as the ideological grounding for the identity and anthropological "remake" of the contemporary human being.

LIST OF PUBLICATIONS

Markuckas, M. 2016. "Iano Hackingo istorinės ontologijos ir Michelio Foucault genealogijos sąsajos," *Problemos*, Vol. 89, pp. 35–47.

Markuckas, M. 2020. "Apšvietos filosofija kaip transhumanistinio mąstymo paradigma," *Problemos*, Vol. 97, pp. 186–197.

CURRICULUM VITAE

Marius Markuckas obtained his BA and MA in Political Science at the Institute of International Relations and Political Science, Vilnius University (2005–2010, 2010–2012). His main research interests lie in social and political philosophy.

NOTES