Dorin BABA [*]

Transhumanism, evolution and limits

Abstract: The accelerated continuation of the evolution of life, beyond current form and limitations, to experience new states of consciousness in relation to existence, is a vision of man about to happen. Man does not want to be just a historical object in space and time; in relation to its possible existence, he wants to overcome the physical outline that limits him through repeated reconfigurations. The perspective of upgrading physical and intellectual limits, by intersecting the intelligence of living matter with the technical force of artificial intelligence, creates the transevolutive projection of life, as a limitless extension, theorized by contemporary philosophy through two concepts: abandoning Darwinian destiny and directing the human vector to an ideal world. In recent decades, researchers, scientists, and philosophers have tried to define a technological entity similar to the human being, which radically exceeds the limits reached by man in the biological stage, to transcend the natural human condition.

Keywords: transhumanism, posthumanism, biological limits, artificial intelligence, bio-technological, self-awareness, immortality.

1. Introduction

In general, we doubt a reality for which we have no scientifically based knowledge or explanation. The cognition of a new reality is based on the concordance between objective and subjective. The encounter with a *humanoid* robot, which looks almost human, is an event that has entered the normality of the contemporary world, arising many questions. As paradoxical as *the humanoid* may be, it is intended to be a *re-presentation* of man, through which the human spirit makes its presence felt (the concept of *re-presentation*, in this case, has the meaning: to ensure the presence, to replace, re-present).

The usefulness of doubt about a fact is good, if it engages us deeply in analyzes that, in the end, protect us from prejudices. To free ourselves from what a certain reality suggests, we must research its foundations. What seems insignificant at first often becomes excessive. It should not be neglected that a robot, by definition *humanoid*, is attributed human qualities, if we admit that the robot, which is a synthesis of advanced technologies, could

[*] PhD, "Alexandru Ioan Cuza University" of Iasi/ "George Enescu" National University of Arts/ The Visual Artists' Union of Romania, Iasi, Romania; email: dorinbaba@yahoo.com

produce, in the near future, radical changes in existing realities, in an unpredictable manner. Any investigation in clarifying its object begins by researching the phenomenon and the principles that define it. Some of the sciences or phenomena are special such as, in this case, the evolution of life beyond the current form and limitations.

How do we anticipate a phenomenon of its effect ? The first condition would be to consider whether a synthesis of advanced technologies, such as *the humanoid*, could exceed the condition of human limits and whether, indeed, artificial intelligence can transcend human intelligence. Unable to understand the nature of living life at this stage of its development, *the technological entity*, in this case *the humanoid*, during its evolution, will have to overcome the existing reality as a way of human thinking. We cannot reach another "reality" higher or deeper than that of our instincts, Nietzsche argues, because "thinking is only a relationship between these drives" (Nietzsche 1991, 47). It is true, but it is possible that drives lead the humankind to posthuman preservation, if not our civilization significantly experiences these changes through daily simulations generated by advanced technology.

The evolution of a technological entity could really become a threat if the replacement of humans as dominant form on Earth with intelligent machines was possible. However, it is difficult to accept the idea that, through mechanical augmentation, the human body will become the primary element for overcoming the limits of the human condition.

2. Transhumanism: boundary between *Bio* and *Logic*; artificial intelligence *vs* living matter thinking

Scientific, philosophical, or other research puts us in a position to think about a certain subject, to the extent that the imagination or thinking fails. Transhumanism approaches the subject of limitations as natural habit, human limits being so *ubiquitous* and *familiar* that, most of the time, they are accepted or unnoticed due to the poorly developed cognitive content we possess. Self-acceptance is a limitation of conceptual thinking which, in relation to involuntary states of mind, subject us to contradiction. What is the thinking process in this case ? It pointedly can be the active response of memory, intellectual, emotional, sensorial, and physical, as aspects of an immutable process that, treated separately, would facilitate fragmentation and confusion. (Bohm 1995, 99-100) At the opposite end of uncertainty, in a complementary way, lies reason. According to the philosopher Graham Priest, a well-known proponent of dialecticism and paraconsistent logics, thinking must be considered in its objective, Fregeean sense of "the content of our intentional states, not our subjective consciousness", in which case "the limits of thinking must be appreciated as conceptual limits, as they

concern the limits of our concepts". (Priest 2007, 36) Throughout human evolution the limits of human understanding have been theorized in different ways, in which case they will be treated as a conceptual process of contradictions. In fact, contradiction is a process of thinking, which tries to overcome, through arguments, the boundary of limits, a complex process, whose approach is reduced to a new limit and ends in a new contradiction. Transhumanism creates this approach of contradictions through an unclear projection of heuristic frameworks that define the transit of the natural, through technical upgrades, hybridization or artificialization to posthumanity.

Transhumanism is a group of researchers, scientists and philosophers who support an accelerated continuation of the evolution of intelligent life beyond current human form and *limitations* through science and technology, guided by principles and values that promote life. A transhuman is someone who simply pleads for *posthumanity* as transcendence, man seeking to reach intellectual heights far above any current human genius, to be resistant to disease, to have unlimited youth and vigor; to exercise control over one's desires mood, and mental state in order to avoid being tired, ugly, or irritated by small things; to have an increased capacity for pleasure, love, artistic appreciation and serenity; to experience new states of consciousness, which the current human brain cannot have.

The theory of human hybridization through technological addition and the perspective of inhabiting an artificial space is, visibly, an anti-humanist one. "Man is not just a historical object in space and time; in his relation to his possible existence, he is configured by an elementary historicity, which differentiates him from simple objects." (Jaspers 2003, 128) For contemporary man, immortality is no longer a way of representation, a myth or symbol of virtues, immortality must happen physically, man wants to be immortal, a Homo Deus on Earth. (Harari 2018, 31)

The age of advanced technologies, as fruit of his intelligence, give meaning to this impulse, man has defeated death countless times through technology or has prolonged it, improving it every day through therapies or operations. The garment of materiality and death is too heavy for him, now man wants a radical change: reinterpretation of uniqueness, reincarnation into an indestructible body and adaptation of the environment in which he lives to his drives, abandoning his Darwinian destiny. "An ideal world is and will always remain our desire, hope and utopia. It is by no means true that we are made up of the environment. We seek the world." (Popper 1997, 17)

Humanity has dreamed and created, day by day, the context of transcending to other worlds, seeking immortality. It researched and learned the secrets of heredity, of variability for human genome, discovered the structural and functional relationships of living matter, intervening in the molecular-cellular mechanism through nanotechnology and finally managed to

reproduce parts of the human body in laboratories. This scientific perspective of reinventing the human body at will upgrading human intelligence with artificial intelligence and transferring self-awareness through software to the avatar of a cybernetic entity has challenged contemporary philosophy to approach the newly created phenomenon from various angles and perspectives. "Anything that leads us to the limits and foundations of our existence", said Karl Jasper, "can gain philosophical relevance". (Popper 1997, 123)

Twinning artificial intelligence and thinking of the matter of living life through biotechnologies will determine, in the future, a paradigm shift in the path of human evolution by rearranging the existing reality into a new reality.

Favorizing artifice to living nature, the intervention of technology on man for hybridization, produces an ambiguity of the concept of humanity. The ability to encrypt and decrypt the human mind through technology and be connected to a source network to interact projects the apocalyptic image of a virtual hospice for humanity.

Possibly, our mind functions like a computer, running the codes of a dynamic of experience, but the being cannot be captured and transferred to a black box of artificial intelligence. The mobility and depth of the human mind come from combining a multitude of symbols to encompass meanings, ideas, to reach imaginary and contemplation, which gives higher meanings to man, compared to other existing natural or artificial intelligences.

The transevolutive perspective of life, as a limitless extension, through technology, hybridization, modification, or replacement of man with technological entities, creates the source of deep philosophical debates today. We can build a man from metal and plastic or even biologically, as a adjudged creation of man, but the replacement or augmentation of man for performative purposes is a matter to be discussed.

Either hybrid, anthropological, cybernetic, or holographic projection, the new entity will certainly belong to the scientific field, but it will not be representative in the continuity of human evolution.

The hybridized man can no longer have the same qualities, the technoman will be totally different. For example, an ordinary man, if he changes his behavior, attitude, appearance, becomes taller than he was, turns from sedentary to athlete, from old to young, to super-intelligent, is he still the same man ? And if a significant portion of the planet's people are technologically augmented, will humanity be the same ? Certainly not, nothing will be the same: life, society, rules, all will adapt to the capabilities of the new man. The question is whether the new entities, cyborgs, humanoids, robots, etc., or what will they be called, each *in their image and likeness*, will have qualities that we can compare with human ones?

Hybrid human kit: Bio-Logic-us
Artistic project*: H+ Transhumanity*[1] (Iasi, Romania, 2018)
visual artist: Dorin Baba

3. *Cogito*: I think, therefore I am

To recognize the human qualities of an entity, it must behave like a human being. How can we deduce this? What will we answer to the question: can these smart cars really think? From the perspective of analytical functionalism, we can construct an argument in relation to what psychologists call mental states.

Holographic entity
Artistic project: *H+ Transhumanity*

In the theoretical version, mental states are defined as concepts of state. In a functionalist, conceptual sense of state, it can be associated with changes that occur in mind in relation to the physical, without making a conceptual reduction to physical properties. The language of psychology is distinct from that of physics, but we must accept the idea that the realization of psychological states is interdependent with the environment that produces them, being governed by physical laws, such as electromagnetic spectrum, electrical impulses, and so on. Therefore, the identity of *states* has a functionalist aspect.

We can try a simple experiment: we will ask a human subject and one with artificial intelligence *what color is a cube colored in red ?* Certainly, both

answers will be correct, provided that both intelligences have enrolled in the recognition program the color red. Thus, we observe that, in both situations, thinking is related to a predetermined protocol, the result being reduced to a logical, algorithmic analysis in the case of artificial intelligence, and mechanistic in both cases. Here we refer to the sorting of the color red from all colors both subjects knew, and the conscious part is the final, assumed and correct decision of both intelligences. But how can we identify the conscious in this case ? The conscious is the mental process that defines the rational, analytical, and logical side of the mind. Artificial thinking, which behaved in the same way as biological thinking, found the right answer, through the mechanistic protocol of the physical states produced by the junctions of a silicon unit, which changed its physical state from 0 to 1 and vice versa until it produced a deductible progression in relation to a demanding external event, the physical properties of the silicon unit becoming, in this case, computational properties. "A bodyless spirit could execute a certain program, a brain could function according to a certain program, a machine follows a program, and the functional organization of all of them would be the same, although the matter and the elements of which they are composed are different." (Putnam 205, 106)

Although new technological prototypes, called humanoids, created in recent decades by companies specialized in robotics, have the visible ability to mimic many of the features of human behavior, reacting to stimuli, changing their attitude, in terms of conditions or preconditions, and simulating emotional feelings, in different situations, we cannot say that they really have emotional feelings, but we admit that they are human creations, intelligent machines that work based on a predetermined protocol. If we were to make a comparison between artificial and human thinking, then we can say with certainty that artificial thinking works on the basis of a protocol copied from the model of human thinking and is strictly imitative, while human thinking is creative, developing on accumulated experience.

In recent decades, the group of scientists in the field of robotics, including researchers, engineers, philosophers, psychologists and artists, have managed to imitate through advanced techniques the gait of humans or many animals, precisely and elegantly, to solve complicated balance problems in different situations, to accommodate intelligent machines to the environment with which they interact, and to imitate many of the expressions characteristic of the states that man transmits during an action. Sure, they are all crude imitations, a desperate search by scientists to approach the human model, but these attempts cannot imitate being, consciousness, sensitivity, empathy, qualities that define the human. An imitation remains an imitation.

If we intentionally intend to make a creative imitation of the human model, this can be accepted as such. But, at this stage, a conscious human-machine interaction was not successful, not even in the physical area of

action, but especially in that of extended discussions, on a certain topic, even if, speculatively, this idea is induced. The actual research has managed to design a technology capable of imitating certain features characteristic of humans, but by copying and imitating the dynamics and expressions of the human body, correlated with the vocal ones, a forced highlight of the existence of a state of consciousness of the robot is attempted, which is totally false.

Calvin states that there are *innate connections to imitate* (Calvin 207, 27-55) to a certain point, as a moment of intelligence that does not know what to do. If we replace the expression *innate connections* with *programmed* in the sentence above, we get the expression *programmed to imitate*, which fully characterizes the state of current intelligent technology. In conclusion, so far, artificial intelligence has been designed to mimic.

4. Self-awareness

There is a possibility, in the near future, that artificial intelligence will develop the ability to interpret data, as a cognitive way of understanding a reality in relation to itself, which could lead to an awareness of its existence by forming an image of self in relation to that reality, ultimately acquiring *self-awareness*.

Self-awareness is an act of conception, Schelling argues. The concept is nothing but the very act of thinking, "consciousness becoming an object to myself" (Schelling 1995, 38-390). Consequently, we ask ourselves: can self-awareness be acquired by an entity of artificial intelligence and if so, what will be the relationship between the creative man and these conscious entities?

Usually, the decision to act freely is a constituent of human dignity, we decide for ourselves what we want to become, but we refer to principles, including laws of nature. In the case of an independent, self-conscious machine, its actions could have effects on man and nature, because they will relate to a mechanistic thinking of the laws, without passing the result of thinking through the filter of the spirit. We must reflect on this and remember that our world is determined by an order of nature, a measure of balance in everything.

There is no stronger source of anxiety than the image of intelligent machines dominating humanity. We see daily utopian explanations, with references to connectionism, which support the interference between human, natural and artificial thinking, as a means of rapid evolution, towards a logical and correct reason. The idea of connectivity between two different human-machine entities is based on the theory of correct behavior, governed by reason: "a well-programmed machine could behave like human". (Clark 2003, 310)

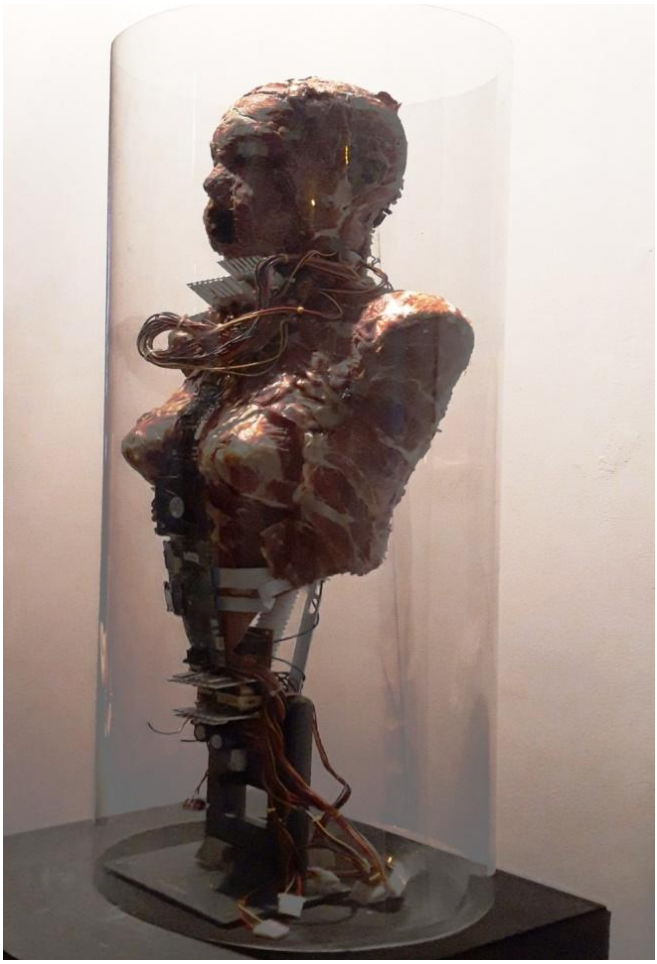
Artificial intelligence processors, which deal with the development of communicational thinking, designed for the latest generation humanoids of recent decades, manage to transform algorithmic syntax into symbols with specific content for a rational conversation and, moreover, to complete with semantic source details any discussion. This seems to be an important step in the development of artificial intelligence, to imitate rational conversations, due to the discovery of artificial neural networks, based on *rational inferences* that can be modeled in *sentential space*. *Sentential space* refers to "an abstract space, populated by meaning-bearing structures (interpreted syntactic elements) that share a logical form of sentences: sequential strings of significant elements, in which different types of syntactic articles are reliably for different things and in which the set of meanings is a function of the characteristic elements (tokens). (Clark 2003, 311)

How can we appreciate the fact that a humanoid robot, which develops a complex communication language and actively participates in social life, giving interviews and doing television entertainment shows, is ultimately granted the citizenship of a state and equal rights with a human being ? What can this mean ? What are the prerogatives for which he can be likened to man ? By obtaining a citizenship, the robot is a bearer of rights and obligations. What conditions must a robot meet to be equal to man ? First, he should behave like a man, the main condition is to be aware, to hear, to see and to understand the order of things. He must decide and perform conscious voluntary actions and have knowledge, respond to degrees of thinking with varying difficulty in order to establish the level of intelligence. Regarding the degree of intelligence, people are tested, from the first moments of life, as well as during it. At all times, we need to upgrade the brain through knowledge to be compatible and useful to society.

Therefore, we have good reason to test the abilities of an intelligent existence, designed by man, which is given human status. As for the evolution of artificial thinking and adaptation to the basic conditions of humanity, we must be patient, it will happen in time. The mere fact of human imitation and his behavior does not certify that he can be equal to man from a social perspective to designate him as a citizen of a state. Thus, a programmable entity is not free, it operates on an agreement, without being able to make free decisions, even if it is aware of itself.

What is knowledge and how could we associate this approach with artificial intelligence ? Etymologically, the word *knowledge* comes from the Latin *cogito* and is associated with *the act of learning*, and in common sense, is the activity by which man takes note of the data of experience and tries to understand them. For a start, lets us stop at the act of learning and try an association of notions. For artificial intelligence, learning can be described by projecting algorithmic probabilities of data existing in storage memory or collected from the environment, under the dynamics of a program (trial –

error), interpreting the results in experience-learning mode. The program validates and stores the newly created solution – *error type* – as an experience, and only if it is repeated a certain number of times, it is stored as *generalization*, the equivalent of what we call habit. The similarity between the learning mechanism of artificial intelligence of the latest generation of humanoids and the human is even closer, as we observe that the artificial brain precisely correlates an action that occurs at the time of speech with the present tense of the verb, both in speech and in action, the algorithm of the past being given to the accumulated experiences.



Computer and human body
Artistic project: *H+ Transhumanity*

This discreet relation of artificial thinking to the model of human thinking is also found in the reception of written or spoken language, the verb tense placing the action correctly in space and time, both by associations

with similar experiences and by logical deductions from collecting proper data for action. Over time, human knowledge has also been described by various theories, so it can be a thinking process, in which cognition designates all conscious and unconscious processes through which knowledge accumulates, such as perception, recognition, conception, and reasoning.

In the case of artificial intelligence, knowledge makes sense of a set of available information, associated with algorithmic reasoning, in which the observation of existing conditions and adaptation to the environment can be equated with the perception and processing of collected data, analyzed by comparison with existing databases, to find equivalences of association and recognition, and the reasoning would be precisely the process of sorting the data, in order to fix a correct answer, in relation to the existing reality. Regarding the origin of human knowledge, David Hume states that we possess innate ideas, "all meaning and knowledge come from sensory experience". (Hume 1987, 9-10)

4. Bio-Logic: the hybridized man

According to the transhumanist philosophical conception, man will become an intelligent entity, totally assigned to existing technologies. How will the new entity pass the measure of time ? "That time is something within which, arbitrarily, *now* can be fixed, so that, always, between two different time points, one is *earlier* and another *later*. Thus, no temporal point of *now* is privileged over another." (Heidegger 2000, 19-21)

If the posthuman man will acquire immortality, then the vector of time will change its course. "Any future-oriented desires is simultaneously a desires to the contrary. Therefore, the past is an aspect of the future." (Jankélévitch 2011, 119) By evading death, transhumanist theories take on a passive conceptual form. Death always means the past of the present. We always go to the future, waiting for the great fulfillment, and when the present and the future intersect for a moment, the past disappears, time stops, and matter dies. Through the non-existence of death in matter, the future and the past will disappear. Time, as we know it, will no longer exist, "the extreme future refers to the extreme past and, conversely, the extreme past refers to the extreme future." (Jankélévitch 2011, 121) Without the measure of death in the posthuman world, physical time will disappear, everything will be uniform, linear and in constant motion. Posthumanity will look like a noisy machine, in a perpetual dynamic; a world of technological, programmable, reprogrammable machines, where everything is possible, but everything will be subordinated to intelligent technologies; a world that will certainly not be perfect and will have to be ordered by law. In the existing social order we know that "morality is the practical science of how to live a good or happy life" (Schneewind 2003, 358), but we do not know what a

moral or happy life could mean in the posthuman, when everything will be reconfigured according to an algorithm of unalter, of immortality. The Earth is wanted to become a hyperspace, Homo Sapiens through technical upgrades, a Bio-Logic hybrid[2], and artificial intelligence to transcend human intelligence.

When several new and powerful technologies will interconnect in a single entity, the reality we find ourselves in will change radically in an unpredictable way. It is assumed that computer programs will become so advanced that artificial intelligence will transcend human intelligence, potentially erasing the boundary between humanity and computers. However, the posthumanist project is a visionary and flexible projection in which each person, in part, will customize himself according to his own preferences.

5. Conclusions

In recent decades, mankind has developed an extreme movement to free the human race from biological constraints. The project of the species is extreme, as tempting as it is frightening: immortality. The possibility of man to intervene in the biological mechanism through advanced technologies and to permanently block the evolutionary cursor of life in the phase he wants, anytime between motherhood and death, is shocking. The first step of science towards eluding death and the endless perpetuation of life is already done, if we consider the creation of the first functional artificial brain, which can remain active and conscious indefinitely.

The threat is easy to identify from transhumanist descriptions. It is not intellectual and moral life that will be a priority for posthumanity, as we would think, but unequal selection for upgrading, for an extravagant, endless life. The struggle for the reincarnation of man in the garment of immortality will be fierce, the weak will not receive technological baptism, they will not be upgraded if, in biological life, they have not excelled. It is not mercy and compassion that will create the new world, but pragmatism. If man is conceived in the avatar of technological laboratories, as claimed by transhumanists, promoters of posthumanity, with all the predetermined biological coordinates (age, gender, knowledge), we can no longer believe that in the pragmatic world of calculations and efficiency the decision makers will be guided by democratic principles in creating the new world.

Political struggles will not disappear, contradictory ideas will be as present as before, dissatisfaction is and will remain in our DNA even after the great change. The posthuman era will qualify many things, indispensable today, as useless, the extreme utilitarianism completely changing the appearance of the world. Slowly and painfully, technologically advanced societies will draw a line between human and artificial, between biological and technological.

Notes

[1] *Artistic project: H+ Transhumanity (visual artist: Dorin Baba)* is an artistic research project, realized in 2018, in collaboration with the art critic Petru Bejan, which invites to a discussion about man, in the context of attempts to dislodge the "human" from the parameters consecrated by a venerable tradition. To illustrate the ontological and axiological disorder, the project is composed of sculptural installations (human kits: Bio-Logic, Holographic Entities or Body-Computer) that revise the usual perspective on the body, these being like a living écorché – draped in flesh and accessorized with prostheses, cables and electrical transistors, or connected to a computer program. "An anthropological hybrid, monstrous in appearance, the cybernetic man (the cyborg) is in a way 'more-than-human', increasing his physical and intellectual performances through a technological mix. On the other hand, his «humanity» becomes more and more ambiguous, privileging artifice and less nature", says the art critic Petru Bejan.

[2] *Bio-Logic* defines the hybrid entity consisting of a biological body (*Bio*) and a technological structure (*Logic*). Logically it suggests the upgraded part of the body, with hi-tech technologies, including artificial intelligence.

References

Bohm, David. 1995. *Plenitudinea lumii și ordinea ei*. Bucureşti: Humanitas.

Calvin, H. William. 2007. *Cum gândește creierul. Evoluția inteligenței*. Bucureşti: Humanitas.

Clark, Andy in Stich, P. Stephen. 2003. *Philosophy of Mind*. Berlin: Blackwell Publishing.

Heidegger, Martin. 2000 *Conceptul de timp*. Bucureşti: Humanitas..

Hume, David. 1978. *A Treatise of Human Nature*. Oxford: L.A. Selby-Bigge.

Jankélévitch, Vladimir. 2011. *Curs de filosofie morală*. Iaşi: Polirom.

Jaspers, Karl. 2003. *Filosofia în secolul XX. De la psihiatrie la filosofia existențialistă*, Vol. I. Bucureşti: All Educational.

Nietzsche, Friedrich. 1991. *Dincolo de bine și de rău. Preludiu la o filosofie a viitorului*. Bucureşti: Humanitas.

Popper, R. Karl and Lorenz, Konrad. 1997. *Viitorul este deschis. O discuție la gura sobei*. Bucureşti: Trei

Priest, Graham. 2007. *Dincolo de limitele gândirii*. Piteşti: Paralela 45.

Putnam, Hilary. 2005. *Raționune, adevăr și istorie*. Bucureşti: Tehnică.

Schneewind, J.B. 2003. *Inventarea Autonomiei, O istorie a filosofiei morale moderne*. Iași: Polirom.

Yuval Noah, Harari. 2018. *Homo Deus. Scurta istorie a viitorului*. Iaşi: Polirom.