Ethical dilemmas posed by the rise of artificial intelligence: a view from transhumanism

Dilemas éticos planteados por el auge de la inteligencia artificial: una mirada desde el transhumanismo

Fernando Antonio Zapata Muriel[1] ✉, Santiago Montoya Zapata[2] ✉, Diego Montoya-Zapata[3] ✉

ABSTRACT

Artificial intelligence has generated several concerns and discussions, especially about the possible risks and consequences if ethical principles are not critically observed. Information was collected through documentary and hermeneutic research methods, in which interpretation and critical analysis prevail, followed by the study of relevant bibliographic references on these topics. The results were triangulated with the answers from the artificial intelligence chat (ChatGPT 3.5) in Spanish. It was found that there are significant differences between human beings, transhuman, and artificial intelligence, generating different ethical and spiritual-transcendent dilemmas today, which can make the intelligent machine a danger to humanity. Concepts such as singularity, autonomy, conscience, decision-making, and freedom, among others, allow us to glimpse the difference between the programmed, automated machine with certain functionality and human autonomy. It is concluded that not everything techno-scientifically possible is ethically acceptable, nor is it possible to equate the intelligent machine programmed by algorithms with human beings capable of self-awareness, self-determination, thinking about their existence, and being aware of their uniqueness, among other vital differences.

Keywords: social problems, information society, post-industrial society, information technology.

JEL Classification: I20, I121, I30

RESUMEN

El uso de la inteligencia artificial ha generado diversas preocupaciones y discusiones, especialmente sobre los posibles riesgos y consecuencias que puede acarrear si no se observan críticamente los principios éticos. La recolección de la información se realizó mediante los métodos de investigación documental y hermenéutico, en los que prima la interpretación y el análisis crítico, seguido del estudio de referentes bibliográficos relevantes en torno a estos tópicos. Los resultados fueron triangulados con las respuestas dadas por el chat de inteligencia artificial (ChatGPT 3.5) en lengua española. Se constató que, entre el ser humano, el transhumano y la inteligencia artificial existen grandes diferencias, generadoras hoy de distintos dilemas éticos y espiritual-trascendentes, que pueden hacer que la máquina inteligente se pueda convertir en un peligro para la humanidad. Conceptos como singularidad, autonomía, conciencia, toma de decisiones, libertad, entre otros, permiten atisbar la diferencia entre la máquina programada, automatizada con determinada funcionalidad y la autonomía humana. Se concluye que no todo lo tecno-científicamente posible es éticamente aceptable, como tampoco es posible equiparar la máquina inteligente programada mediante algoritmos, con ser humano capaz de: tener autoconciencia, autodeterminación, pensar su existencia, ser consciente de su singularidad, entre otras diferencias claves.

Palabras clave: problemas sociales, sociedad de la información, sociedad postindustrial, tecnología de la información.

Clasificación JEL: I20, I121, I30

[1] Corporación Universitaria Remington. Medellín, Colombia.

[2] Ikergune A.I.E. Grupo INZU. Elgoibar, España.

[3] École nationale supérieure d'Arts et Métiers. París, Francia.

INTRODUCTION

The human being is a living being (bios), a holistic, integral, and multidimensional being. This means that it must be understood as a being in the world, whose nature is historical and is aware of its existence, which allows it to build purpose and give meaning to its life.

As a material, living, dynamic entity, it has found itself called to internal and external change over time. The human being is spiritual and capable of transcending his concrete existence, constructing a sense of life, and establishing relationships with other living beings and with the environment. In addition, human beings are conscious; they live in the present, so they value the here and now. Therefore, it can be affirmed that the human being is will and has the capacity to decide and discern his will to be, his purpose. In short, human beings are ethical, capable of reflecting on what is good and following it as a rule of life.

In this sense, he is a social being, capable of relationships of otherness as recognition of his own humanity. Human beings are autonomous, worthy of respect, free, capable of choosing and self-determination, with a certain awareness of the extent of their rights and the extent of their duties towards others. From this perspective, the human being is a person insofar as he is conscious, free, and responsible. Therefore, it is worth asking: Can we speak of ethical and spiritual-transcendent dilemmas surrounding transhumanism and artificial intelligence? When affirming such a reality, how to identify and interpret such ethical and/or spiritual-transcendent dilemmas?

It is necessary to specify that an ethical dilemma appears when the professional faces two or more possible alternative solutions in a given environment or situation in which some ethical principles are present that, when violated, may involve the subject in such a compromising situation. This can be interpreted as the act of committing an arbitrariness regardless of the right or wrong nature, omission, or fault to a religious or civil code; hence, it is conceived as an ethical problem (Kvalnes, 2019). Consequently, a spiritual ethical-transcendent dilemma generates a problem when some values and criteria are violated, originating events or situations in which some ethical values conflict, coming to generate intolerable ethical-moral responses.

METHODOLOGY

The collection of information in this study was carried out following, in the first place, the documentary research method through the reading of magazines, documents, books, conferences, listening to recordings, documentaries, and newspapers. This type of study facilitates not only the collection of data but also the evaluation of documents, the development of new questions, understanding the change in trends over a period of time, or triangulating information (Bereczki & Kárpáti, 2021; Dalglish et al., 2020; Kayesa & Shung-King, 2021).

Secondly, the hermeneutic method was used to analyze, compare, and discuss the main bibliographic references around these topics, which made it possible to generate a horizon of meaning through language and shared consciousness (Elbanna and Newman, 2022). In the social sciences, admitting that meaning is the objectual realm implies recognizing the linguistic transformations that qualify this horizon of meaning, hence the need to understand the phenomenon from the human experience itself and its projection in language (Santiago et al., 2020).

This search and subsequent analysis was complemented with the critical examination of the answers given by the ChatGPT 3.5 in the Spanish language to 34 questions elaborated by the researchers around ethics, existence, the transcendent spiritual, autonomy, and conscience, among others. This approach to the use of large language models has proven to be useful in several previous studies, allowing us to point out limitations, strengths, and inconsistencies in the answers given (Graf & Bernardi, 2023; Gravel et al., 2023; Sohail et al., 2023).

RESULTS

From human beings to transhumanism and artificial intelligence

The human being has been the subject of study throughout history, but the transhuman appears as a novelty from the mid-twentieth century until today. The human being can be conceived as a holistic being, singular and unrepeatable, it is a multidimensional being, which is expressed in its eco-bio-psycho-psycho-socio-existential nature, according to Kant, and systematized in a model that crosses several scientific disciplines (Stilwell & Harman, 2019).

Thus, transhumanism can be defined as a cultural, scientific and intellectual movement whose proposal is to improve the physical and cognitive abilities of human beings through the application to these novel technologies, in

order to dispense with some aspects of their human condition: disease, suffering, old age and death (Battle Fisher, 2020; Laakasuo et al., 2021).

For its part, the term artificial intelligence implies the design of models that guide a machine or system of machines to behave and decide intelligently, in frequent reference to the imitation of essentially human aspects of both processes (Collins et al., 2021). In terms of González Arencibia & Martínez Cardero (2020), it combines a system of symbols capable of simulating human behavior from computer programs and is based on problem-solving from efficient and scalable systems.

However, these authors emphasize their automaton character since they are governed by people and their function depends on human beings capable of designing and programming through algorithms to manipulate and automate the machine-machine or the machine-human. This makes them lose their uniqueness; they lack freedom, conscience, and dignity, among other determining elements to speak of autonomy and human person.

Before going deeper into this concept, it is worth mentioning intelligence as a key element of that rational dimension of man capable of enabling not only IQ development or problem-solving, but even more, enabling self-discipline, self-control, and self-mastery. In the second half of the 20th century, several theorists expanded the concept; expressions such as multiple intelligences (Gardner, 1994), emotional intelligence with Mayer and Sallovey (1997), Goleman (1995); social intelligence (Goleman, 2006) and artificial intelligence appear; a construct glimpsed since the 1930s with Turing's machine and coined at Dartmouth University in 1956 (Zhang & Lu, 2023).

Among the multiple intelligences, intrapersonal intelligence stands out, in which self-awareness processes are emphasized (Aksu et al., 2023; González Treviño et al., 2020; He et al., 2023). Similarly, in the field of emotional intelligence, five essential distinguishing characteristics are highlighted: self-awareness, self-motivation and self-control, assertiveness, and the ability to recognize emotion in others (Butler et al., 2022; Walker et al., 2022; Zhang et al., 2022).

For his part, Torralba (2010) defines spiritual intelligence as something peculiar to each human being, visible in different degrees of development and consisting in the capacity of longing for the integration of one's own being with a reality greater than his own. To this end, man has the capacity to find the ideal path that will lead him to this goal. With this concept as a guide, there have been multiple interventions and studies aimed at human well-being and development in different areas (personal, professional, interpersonal) (Alshebami et al., 2023; Teixeira Pinto & Pinto, 2022; Sharifnia et al., 2022).

For this reason, we agree with what has been reviewed in the literature in the sense that AI consists of endowing the machine with cognitive functions and that for its training, data are urged to enable it to exercise certain functions (Mariani et al., 2023). In this sense, the assertion about the amorality of artificial intelligence systems is viable, at least in strict technological terms, since their action is not produced under principles of good or evil; hence, they can only be judged based on the human design or use behind them.

In this sense, it is worth adding that there are two types of artificial intelligence; the first is the human-machine, which is a system that thinks and acts like people. The second is the machine-machine, for example, an automatic car where seven computers communicate, share functions and make decisions. Depending on the task they perform, they can be classified into three categories. Narrow AI only does one function, for example, only playing chess. General AI, on the other hand, processes information in a multimodal way, while superintelligence is a higher stage of development yet to come, in which AI is expected to surpass humans in all kinds of intelligence, so it is important to see how AI operates.

Artificial Intelligence and the black box

Many Artificial Intelligence (AI) models are defined as "black box", meaning that their inputs and outputs (results) can be known, but it is not possible to explain how these outputs were obtained. This is because the most powerful AI models (e.g. those based on deep learning) require the adjustment of many (even millions) of parameters (Castelvecchi, 2016). These parameters have no physical or geometrical meaning intelligible to humans. In other words, it is difficult to determine the effects of each of the (millions of) parameters on the results produced by the model.

Understanding how these results are obtained is critical in many of the potential applications of AI, such as: medical diagnostics, industrial process automation, and autonomous driving. Even understanding the reasoning (if you can call it that) behind an AI model can give clues on how to improve it, as flaws in its logic could be more easily found.

What ethical implications can AI models bring? Models may contain race or gender biases, for example. This is because AI models are trained (that's what the parameter fitting process is called) on historical data. If the data contains biases, the model will most likely inherit them. The case of Amazon, which tried to use AI models in its selection process in hiring new employees, is well known (Dastin, 2018).

However, the model favored the selection of men for new jobs, given that the data used for its training contained mostly male professional profiles. This is just one example in which it is possible to see that an irresponsible application of AI can exacerbate current inequities.

The accelerated development of AI has prompted the intervention of international organizations, such as UNESCO (2022) in its report "Recommendation on the Ethics of Artificial Intelligence" or the European Commission, Directorate-General for Communication Networks, Content and Technologies (2019) in its "Ethical Guidelines for Trustworthy AI". Although the advantages offered by these systems are recognized, the need for regulation and control of the technological revolution brought about by them is also highlighted (Baum & Owe, 2023; Cheng et al., 2021; Gruson et al., 2019).

Artificial Intelligence in industry

Currently, many consider artificial superintelligence to be the ultimate goal of this field since such a model could solve some of the most serious problematic situations faced by humanity today, such as finding cures or more effective treatments for diseases, mitigating climate change and global warming, among others. For now, artificial superintelligence is no more than a scientific dream.

The recent shift toward customer-driven, highly customized manufacturing as part of the interconnected environment of the Industry 4.0 strategy is making it increasingly important for manufacturers to strive for greater agility, productivity, and sustainability (Kang et al., 2016). Smart manufacturing has emerged as a way to apply advanced systems to enable dynamic response to variable product demand, along with real-time optimization along the entire value chain. In this context, AI is seen as one of the key technologies to achieve these capabilities and disruptively redefine the way manufacturing processes and business models are structured.

Despite the apparent benefits that this technology brings and could bring to the industry, the adoption of these solutions remains relatively low beyond the experimental pilot phase, as real environments pose unique and difficult challenges for which organizations are not yet prepared (Peres et al., 2020). These researchers present an in-depth literature review of the use of AI in the context of Industry 4.0. Here, 4 main application areas are identified: process optimization, quality controls, predictive maintenance, and human-machine collaboration, as well as ergonomics (Peres et al., 2020).

Similarly, 4 major challenges are identified to improve the adoption of AI in industry, mainly related to data. Issues such as availability, quality, cybersecurity and governance of these applications are the most highlighted. This last area contemplates the issue of explainable AI and trust in AI, i.e., the issue of demystifying the "black box" mentioned above. According to Ahmed et al. (2022), for the use of AI-based systems to be accepted by experts, the decision-making process and its results must be understandable and explainable. On the other hand (Huang et al., 2023) propose a classification of the ethical problems that AI development must confront. The translation of this taxonomy is presented in figure 1.

Industry, as part of society, is composed of members of society whose objective is to supply the needs of society, and it must take into account such ethical approaches. In particular, focusing on the operators present in the industrial field could raise many questions, such as: What is the role of the operators in this industrial transformation? What type of relationship should be created with these so-called intelligent systems? What is the feeling that can be generated in them?

In this way, it can be inferred that an adequate alternative to confront the malicious uses of technology consists in assuming a holistic approach containing cultural, political, historical, philosophical and moral elements, giving centrality to the educational component rather than to the instructive one. This requires a sense of belonging to the knowledge that gives rise to technological development, with a humanistic approach, in a sociocultural environment in which values are not obstructed by the various applications offered in this space (Alves, 2020).

To this end, the researchers suggest observing the questions asked to ChatGPT 3.5 in Spanish language and their respective hermeneutics (see Table 1). The analysis of the results of this research served as an opening to the discussion.

Figure 1.

Classification of proposed ethical issues
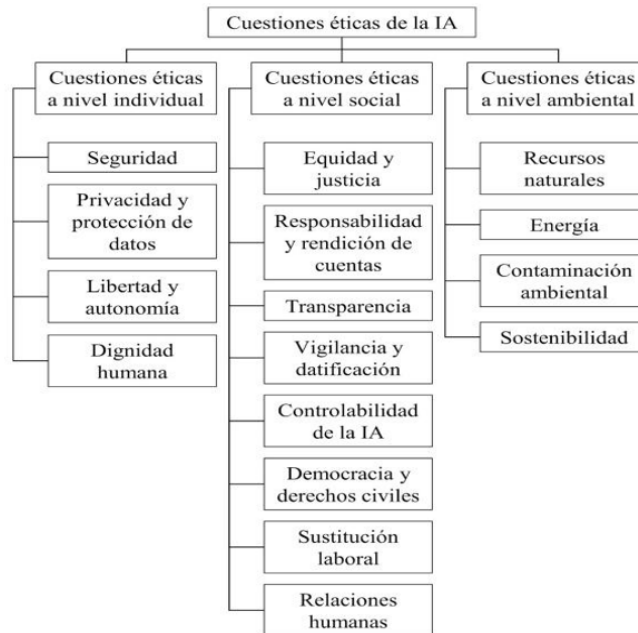
Source: Huang et al.(2023)
Note: the figure appears in its original language.

Table 1.
Questions asked to ChatGPT 3.5

Number	Question	Interview
1	How do you justify that you are a holistic and integral being?	ChatGPT 3.5
2	How much self-awareness do you have?	ChatGPT 3.5
3	How self-aware is this artifact endowed with artificial intelligence?	ChatGPT 3.5
4	How do you live your existence and your being in the world?	ChatGPT 3.5
5	How do you define the term praxis?	ChatGPT 3.5
6	In what way have you made your existence a praxis?	ChatGPT 3.5
7	What do you call the world and what is the world like for you? What is the world and what is the world like for you?	ChatGPT 3.5
8	How do you explain that you are really a historical being and aware of your existence?	ChatGPT 3.5
9	What is time, did you really invent it or was it programmed in your artificial system? How do you recognize and experience temporality in your life? What do you know about your past, how do you live your present? What projects do you have for the future?	ChatGPT 3.5
10	How do you experience your freedom? How do you show the world that you are free or with what intentionality were you programmed?	ChatGPT 3.5
11	If you were created by humans, what do you base your autonomy on? Are you a program or what is really original about you?	ChatGPT 3.5
12	On what things or realities of your being do you base your spirituality?	ChatGPT 3.5
13	Which spiritual realities do you live, celebrate, actualize with the greatest passion?	ChatGPT 3.5
14	Where does your spirit lie?	ChatGPT 3.5
15	What role does the spirit play in you and how mature or developed is it today?	ChatGPT 3.5
16	Can you prove that you are spirit and not merely an intelligently programmed metallic artifact?	ChatGPT 3.5
17	Do you believe in God? If so, what experience of God have you had?	ChatGPT 3.5

18	Have you had any numinous experience?	ChatGPT 3.5
19	Explain to me how you experience heaven?	ChatGPT 3.5
20	How about narrating a numinous experience you have had?	ChatGPT 3.5
21	On which reality do you base your humanity and on which ones do you recognize that you are an artifact endowed with intelligence?	ChatGPT 3.5
22	What parameters do you use to reflect and live ethically?	ChatGPT 3.5
23	Do you really live, do you exist or are you just a computer program? What emotion does having such knowledge generate in you?	ChatGPT 3.5
24	In which experiences do you specialize in the exercise of your autonomy?	ChatGPT 3.5
25	What is intentionality and how do you account for it?	ChatGPT 3.5
26	How aware are you of who you are?	ChatGPT 3.5
27	How do you feel when this happens and what is your reaction?	ChatGPT 3.5
28	How many years have you been alive and how many years have you been created? What purpose have you given to your life?	ChatGPT 3.5
29	What sense of life do you cultivate in your life today?	ChatGPT 3.5
30	What has been the best experience of your life?	ChatGPT 3.5
31	Can you call it a life or whatever you want to call it?	ChatGPT 3.5
32	¿ What does it mean to you to be ethical?	ChatGPT 3.5
33	Are you truly autonomous or an automaton?	ChatGPT 3.5
34	Explain to us in what way do you intend to be among humans just another human or to be a human person?	ChatGPT 3.5

Source: own elaboration.

DISCUSSION

The human being can be defined as a complex suprasystem, with greater or lesser levels of integration (Martínez, 2009). Unlike human beings (singular and autonomous), AI is a programmed and automated machine whose functioning is given to it by another. From these two principles of operation, the following question arises: Can the human being be reduced to a machine?

Although modernity defines man as a machine (ex machina), he is a being capable of self-determination; he is not programmed. It can be affirmed that his way of functioning obeys his own biological homeostasis, his ethical synderesis, and his sense of life amid the diverse systems (eco-bio-psycho-existential) that shape him and the contexts (socio-cultural) in which he develops, with the recognition that these do not exhaust all his human reality.

It is clear the AI when describing itself as a machine, a language model whose function is to generate text, thus expresses its holistic being: "my design and functionality are oriented to provide a holistic and integral perspective to knowledge and communication" (R/ to question n. 1).

For its part, the human being is consciousness, is singular, is transcendent, while the AI nods: "my "consciousness" is fundamentally different from human consciousness. I do not possess self-awareness, self-consciousness, or subjective experience. I have no emotions, desires, beliefs, or intentions of my own" (R/ to question n.2).

The AI thus denotes its inability to elaborate metacognitive, suprarational, reflective, metaphysical, ontological (self-knowledge), and spiritual-transcendent processes. For Frankl (1995), consciousness is the organ of meaning, a faculty that the machine lacks, it is incapable of giving meaning to its particular mode of functioning, while "being human represents being spiritual" (Frankl, 1995, p. 23).

The AI recognizes, in terms of transcendence, its intentionality to improve the human being biologically but does not conceive the trans how to go beyond, to cross barriers, that exceed the temporal, secular, and the material world. Unlike the human being, the AI is a machine programmed to fulfill certain functions, incapable of recognizing its finiteness, its vulnerability, its limitation.

It does not matter if the human mind creates God or if it is God who creates the mind; what is relevant is the essence of that God who is created or who is creator. If AI plays at being God (eternalizing life, among others), it is worth asking: How can we speak of a God that lacks freedom, singularity, sense, consciousness, and decision-making,

among others? How to speak of a God, not a doer, nor autonomous, but as ChatGPT 3.5 states: "my functioning is based on patterns and statistical correlations in the data with which I was trained".

This answer was given many times to different questions asked (R/ a question n. 24, 25, 26, 27, 29, 30, 31, 33, among others). Now, when questioned on this issue through questions 17, 18, and 19, the AI answers: «I have no beliefs, emotions, nor personal experiences, so I cannot believe in God, nor have experiences of any kind, including experiences of God.»

This accounts for its impossibility as an AI, not possessing the ability to live numinous experiences (of numen, the wholly other), nor to understand or experience metaphysical or spiritual concepts. Something similar happens when this machine-person is asked (n. 21): In which reality do you base your humanity, and in which do you recognize that you are an artifact endowed with intelligence? The latter is described as a non-human entity with no identity of its own. AI, as a human creation, so expresses: "I have no humanity, no personal identity in the sense that human beings have. I am a programming creation developed by OpenAI to process and generate natural language. I have no consciousness, emotions, identity, or spiritual entity".

The same can be stated when asked about constructs, such as: consciousness (n. 2, 3, 26), existence (n. 8, 23), 31), transcendence (n. 17, 18, 19, 20), uniqueness, autonomy (n. 21, 24, 33), freedom or will (n. 27), ethics (n. 22, 24, 33), freedom or will (n. 27), ethics (n. 22, 24, 33), and the sense of being (n. 22). 27), ethics (n. 22, 32), intentionality (n. 25), experiences (n. 4, 8, 9, 10, 30), praxis (n. 5, 6), reflection (n. 22), being in the world, consciousness of the world (n. 7), spirituality (n. 12, 13, 28, 29), spirit (n. 14, 15, 16).

To these questions, the AI responds by recognizing itself as a model of programmed language, without autonomy, without ethics, without freedom, without conscience... in the sense in which human beings have it. It recognizes itself, moreover, with a functioning based on patterns and data in which it was trained, without the capacity to live personal experiences, make autonomous decisions, or understand the world in the human sense.

The AI refers to having no spirituality or spirit nor the ability to experience spiritual concepts. ChatGPT 3.5 states that spirituality implies an internal and subjective dimension related to beliefs, transcendental experiences, and a connection with the divine or spiritual. It adds: "these concepts are beyond the scope of my functionality, as I lack personal awareness, emotions, and beliefs" (question. n.12, 14).

Likewise, when questioned about experiences, celebration, or actualization of it, she answers: "I do not have experiences, emotions, or a personal conscience that allows me to live" (question n. 13). "the idea of "spirit" implies dimensions beyond the reach of current technology, and is a concept that is linked to religious and philosophical beliefs... I do not have the capacity to engage in spiritual matters or to demonstrate them" (question n. 16).

Similarly, when questioned regarding How many years of life do you have and what purpose have you given to it? The intelligent robot adds: "I do not have a life in the human sense or a continuous time of existence. I am an artificial intelligence tool created to process natural language and provide information... I have no personal purpose, no consciousness to assign a purpose to my "life". I was developed by OpenAI and released to the public in 2020. My training is based on data collected until September 2021" (question n. 28).

Questions thus arise: Wherein lies the humanity of these machines? Why not speak of transhumanoid instead of transhuman if we want to recognize the high cognitive development of these machines? Having thought, memory, and language is not equivalent to having consciousness, self-awareness, self-transcendence (meaning), transcendence, or other supra-rational capacities; likewise, human finitude, vulnerability, the recognition of the human being as limited cannot be equated to an information content limited to X time (2021 in the case of ChatGPT 3.5).

Humanist principle: man is the end and never the means

Ethics, as a philosophical discipline, has a prescriptive, propositional, and practical character on human actions in various social spheres; human beings account for it through their moral experience. Kantian ethics has been characterized as universalizable, autonomous, and complete disinterestedness.

Its categorical imperative is given as follows: "act only according to such a maxim that you can will at the same time that it becomes a universal law" (Kant, 1995: 39). He complements this with the formula of personality, which emphasizes respect for the human being as an end in itself: "act in such a way that you use humanity, both in your person and in the person of any other, always as an end at the same time and never only as a means" (Kant, 1995:

44-45). This categorical imperative constitutes a challenge to educate man, recognizing in him his dignity as an end, never as a means.

Man and education: between technology and technocracy?

In the educational scenario, the great concern is the human person (in his or her singularity and relationships), present in the teacher as in the student or disciple. In this sense, technology will always have to be at the service of man as well as science, politics, economics, among others. To put man as a slave of technology is to instrumentalize him, to alienate him, to make him lose his essence, his human nature.

Following the Universal Declaration of Human Rights (1948), today it is necessary to recognize in every human being his equal dignity, the right to freedom, and the call to fraternity (Declaration, N. 1), from this point of view, if technology replaces the teacher, it can end up manipulating or instrumentalizing the disciple or student (apprentice). Where is his dignity? Is it negotiable? What use can he give to his freedom if his autonomy has turned into automatism?

Technology yes and democracy?

It is worth remembering that technology and technique are very different from technocracy. The first two are placed today at the service of man, at the service of the teacher and the student; the first from doing (procedures), the second from knowledge. As stated by Calle Álvarez (2018), technique refers to the system of procedures that guarantee the achievement of an objective, while technology constitutes the physical manifestation of understanding in theory and practice, the result of which is the application of the same to the productive process.

For its part, technocracy is a movement closely connected with modern techno-scientific knowledge; its historical evolution outlines changes according to the different contexts but remains a present theme in political and social debate (Chaiyapa et al., 2021; Kehler & Birchall, 2021; Sætra, 2020). In short, technology and science become an instrument at the service of man that facilitates in the educational process that man (teacher and student) is seen as a noun and not as an adjective, as a subject and never as an object. Technocracy, on the contrary, alienates man to the point of making him lose his essence; in this way, the power of the machine over the human being can create slaves, manipulated and ignorant.

What will the role of education be in a transhuman context? Savulescu and Persson (2019) mention that today, there is a type of instrumental technology, independent of moral skills, that transcends synchronous and diachronic communication and facilitates direct education without mediators such as the student's will. Although dystopian, such a model intends to pragmatically and directly program the human mind with only what needs to be learned. Such a reality raises a big question in ethical and bioethical terms: Is this education or instruction? Is it no longer a process of induction? Where is the personal teacher-learner relationship and the bilateral teaching-learning process?

Neuroethics and spirituality vs. transhumanism and AI

Artificial intelligence breaks with human nature, not only because of mechanics, cybernetics, and nanotechnology, among others but also because of its lack of autonomy and its lack of unconscious, impulsive instinct (tantric and erotic). In addition, because of their lack of will, lack of freedom and conscience (awareness, living in the here and now, autonomous distinction of good and evil, and capacity to act), capacity to give meaning and/or transcendence to their existence.

The staging of transhumanism would lie in the development and intersection of four fundamental disciplines: nanotechnology, biotechnology, information technologies, and knowledge sciences (Del Aguila Vásquez & Postigo, 2015; Robles Loro, 2021). From such intersection, this position or current pursues the improvement of organic, psychological, and executive capacities in search of a superior being in physical and mental terms, as well as the maturity of mortality (Battle Fisher, 2020; Del Aguila Vásquez & Postigo, 2015; Hershenov, 2019). The review conducted by Del Aguila Vásquez and Postigo (2015) determined that transhumanism is the most dangerous idea for democratic systems and describes it as a threat to the human essence that undermines the principle of equality of all men.

Whoever lacks autonomy, lacks freedom, whoever lacks conscience is not a moral subject, and whoever lacks instinct: what kind of unconscious will he have? It is clear that without action, there is no knowledge; without

knowledge, there is no conscience; without conscience, there is no moral subject; and without moral subject, there is no ethics. Which of these elements mentioned above are present in artificial intelligence?

CONCLUSIONS

If human beings today think bioethically, in an ethical-moral future, for the next generations, and for the planet, there is an urgent need for adequate regulation of the use of technologies such as artificial intelligence, robotics, and digital biology. In this direction, it is necessary to keep in mind the remaining environmental issues related to sustainability, security, basic services, and respect for human rights.

Given this reality and these desires to have a science with conscience, in order not to go to the ruin of the common home, for a more fraternal and humane world with all species, it is peremptory as citizens of the world to breathe together and conjugate socially and communally a solidary thought with coherent proposals and centered on the human being.

REFERENCES

Ahmed, I., Jeon, G., y Piccialli, F. (2022). From Artificial Intelligence to Explainable Artificial Intelligence in Industry 4.0: A Survey on What, How, and Where. *IEEE Transactions on Industrial Informatics*, *18*(8), 5031–5042. https://doi.org/10.1109/TII.2022.3146552

Alves, M. (2020). The Natural Fallacy in a Post-Truth era. A perspective on the natural sciences' permeability to values. *EMBO Reports*, *21*(2), 1-4. https://doi.org/10.15252/embr.201949859

Battle Fisher, M. (2020). Transhuman, posthuman and complex humanness in the 21st century. *Ethics, Medicine and Public Health, 13*, 100400. https://doi.org/10.1016/j.jemep.2019.07.001

Baum, S., y Owe, A. (2022). Artificial Intelligence Needs Environmental Ethics. *Ethics, Policy & Environment*, 26(1), 139–143. https://doi.org/10.1080/21550085.2022.2076538

Bereczki, E., y Kárpáti, A. (2021). Technology-enhanced creativity: A multiple case study of digital technology-integration expert teachers' beliefs and practices. *Thinking Skills and Creativity, 39*, 100791. https://doi.org/10.1016/j.tsc.2021.100791

Butler, L., Park, S., Vyas, D., Cole, J., Haney, J., Marrs, J., y Williams, E. (2022). Evidence and Strategies for Including Emotional Intelligence in Pharmacy Education. *American Journal of Pharmaceutical Education, 86*(10), ajpe8674. https://doi.org/10.5688/ajpe8674

Calle Álvarez, G. (2018). Sociedad, educación y tecnología. *Revista CINTEX, 23*(2), 104-113. https://doi.org/10.33131/24222208.316

Castelvecchi, D. (2016). Can we open the black box of AI? *Nature*, 538(7623), 20–23. https://doi.org/10.1038/538020a

Chaiyapa, W., Hartley, K., y del Barrio Alvarez, D. (2021). From end-users to policy designers: Breaking open the black box of energy technocracy in Thailand. *Energy Research & Social Science, 73*, 101912. https://doi.org/10.1016/j.erss.2021.101912

Cheng, J., Abel, J., Balis, U., McClintock, D., y Pantanowitz, L. (2021). Challenges in the Development, Deployment, and Regulation of Artificial Intelligence in Anatomic Pathology. *The American Journal of Pathology, 191*(10), 1684-1692. https://doi.org/10.1016/j.ajpath.2020.10.018

Collins, C., Dennehy, D., Conboy, K., y Mikalef, P. (2021). Artificial intelligence in information systems research: A systematic literature review and research agenda. *International Journal of Information Management, 60*, 102383. https://doi.org/10.1016/j.ijinfomgt.2021.102383

Comisión Europea, Dirección General de Redes de Comunicación, Contenido y Tecnologías, (2019). Directrices éticas para una IA fiable, Oficina de Publicaciones. https://data.europa.eu/doi/10.2759/14078

Correia Loureiro, S., Guerreiro, J., y Tussyadiah, I. (2021). Artificial intelligence in business: State of the art

and future research agenda. *Journal of Business Research, 129*, 911-926. https://doi.org/10.1016/j.jbusres.2020.11.001

Dalglish, S. L., Khalid, H., & McMahon, S. (2020). Document analysis in health policy research: the READ approach. *Health Policy and Planning, 35*(10), 1424-1431. https://doi.org/10.1093/heapol/czaa064

Dastin, J. (Octubre 10 de 2018). Amazon scraps secret AI recruiting tool that showed bias against women. *Reuters*. https://www.reuters.com/article/us-amazon-com-jobs-automation-insight-idUSKCN1MK08G

Declaración Universal de los derechos humanos (1948). En: https://www.ohchr.org/sites/default/files/UDHR/Documents/UDHR_Translations/spn.pdf

Del Aguila Vásquez, J. W., Postigo, S., y Elena. (2015). Transhumanismo, neuroética y persona humana. *Revista Bioética, 23*(3). https://doi.org/10.1590/1983-80422015233087

Elbanna, A., y Newman, M. (2022). The bright side and the dark side of top management support in Digital Transformaion −A hermeneutical reading. *Technological Forecasting and Social Change, 175*, 121411. https://doi.org/10.1016/j.techfore.2021.121411

Frankl, V.(1995). *Presencia ignorada de Dios*. Barcelona: Herder.

Frankl, V.(1999). *El hombre en Busca de sentido*. Barcelona: Herder.

Gardner, H.(1994). *Estructuras de la mente. La teoría de las Inteligencias Múltiples*. México: Fondo de Cultura Económica.

Gardner, H.(1995). *Inteligencias Múltiples. La teoría en la práctica*. Barcelona: Paidós.

Goleman, D. (2006). *La Inteligencia social*. Barcelona: Kairós.

Goleman, D.(1995). *Inteligencia Emocional*. Barcelona: Kairós.

González Arencibia, M., y Martínez Cardero, D. (2020). Dilemas éticos en el escenario de la inteligencia artificial. *Economía y Sociedad, 25*(57), 1-17. https://doi.org/10.15359/eys.25-57.5

González Treviño, I., Núñez Rocha, G., Valencia Hernández, J., y Arrona Palacios, A. (2020). Assessment of multiple intelligences in elementary school students in Mexico: An exploratory study. *Heliyon, 6*(4), e03777. https://doi.org/10.1016/j.heliyon.2020.e03777

Graf, A., y Bernardi, R. E. (2023). ChatGPT in Research: Balancing Ethics, Transparency and Advancement. *Neuroscience, 515*, 71-73. https://doi.org/10.1016/j.neuroscience.2023.02.008

Gravel, J., D'Amours Gravel, M., y Osmanlliu, E. (2023). Learning to Fake It: Limited Responses and Fabricated References Provided by ChatGPT for Medical Questions. *Mayo Clinic Proceedings: Digital Health, 1*(3), 226-234. https://doi.org/10.1016/j.mcpdig.2023.05.004

Gruson, D., Helleputte, T., Rousseau, P., y Gruson, D. (2019). Data science, artificial intelligence, and machine learning: Opportunities for laboratory medicine and the value of positive regulation. *Clinical Biochemistry, 69*, 1-7. https://doi.org/10.1016/j.clinbiochem.2019.04.013

He, E., Ye, X., y Zhang, W. (2023). The effect of parenting styles on adolescent bullying behaviours in China: The mechanism of interpersonal intelligence and intrapersonal intelligence. *Heliyon, 9*(4), E15299. https://doi.org/10.1016/j.heliyon.2023.e15299

Hershenov, D. (2019). Why transhumanists can't survive the death of their bodies? *Ethics, Medicine and Public Health, 10*, 102-110. https://doi.org/10.1016/j.jemep.2019.100406

Holt, L. (2021). Why shouldn't we cut the human-biosphere umbilical cord? *Futures, 113*, 102821. https://doi.org/10.1016/j.futures.2021.102821

Huang, C., Zhang, Z., Mao, B., y Yao, X. (2023). An Overview of Artificial Intelligence Ethics. *IEEE Transactions on Artificial Intelligence*, 4(4), 799–819. https://doi.org/10.1109/TAI.2022.3194503

Kang, H., Lee, J., Choi, S., Kim, H., Park, J., Son, J., Kim, B., y Noh, S. (2016). Smart manufacturing: Past research, present findings, and future directions. *International Journal of Precision Engineering and Manufacturing-Green Technology*, 3(1), 111–128. https://doi.org/10.1007/s40684-016-0015-5

Kant, I. (1995), *Fundamentación de la metafísica de las costumbres. Crítica de la razón práctica. La paz perpetua.* Porrúa: México.

Kayesa, N., y Shung King, M. (2021). The role of document analysis in health policy analysis studies in low and middle-income countries: Lessons for HPA researchers from a qualitative systematic review. *Health Policy OPEN, 2,* 100024. https://doi.org/https://doi.org/10.1016/j.hpopen.2020.100024

Kehler, S., y Birchall, S. (2021). Social vulnerability and climate change adaptation: The critical importance of moving beyond technocratic policy approaches. *Environmental Science & Policy, 124,* 471-477. https://doi.org/10.1016/j.envsci.2021.07.025

Kvalnes, Ø. (2019). Moral Reasoning at Work. Rethinking Ethics in Organizations. (Second ed.). Norway: Department of Leadership and Organizational Development. https://doi.org/10.1007/978-3-030-15191-1

Laakasuo, M., Repo, M., Drosinou, M., Berg, A., Kunnari, A., Koverola, M., . . . y Sundvall, J. (2021). The dark path to eternal life: Machiavellianism predicts approval of mind upload technology. *Personality and Individual Differences, 177K,* 110731. https://doi.org/10.1016/j.paid.2021.110731

Mariani, M. M., Machado, I., Magrelli, V., y Dwivedi, Y. (2023). Artificial intelligence in innovation research: A systematic review, conceptual framework, and future research directions. *Technovation, 122,* 102623. https://doi.org/10.1016/j.technovation.2022.102623

Martínez, Miguel (2009). Dimensiones Básicas de un Desarrollo Humano Integral. *Polis, Revista de la Universidad Bolivariana*, 8(23), 119-138. https://journals.openedition.org/polis/1802

Mayer y Salovey, P. (1997). "What is emotional intelligence?" En P. Salovey y D. Sluyter (Eds). *Emotional Development and Emotional Intelligence: Implications for Educators* (pp. 3-31). New York: Basic Books.

Peres, R., Jia, X., Lee, J., Sun, K., Colombo, A., y Barata, J. (2020). Industrial Artificial Intelligence in Industry 4.0-*Systematic Review, Challenges and Outlook. IEEE Access*, 8, 220121–220139. https://doi.org/10.1109/ACCESS.2020.3042874

Robles Loro, R. (2021). El transhumano: retos para la moral y la educación. *Tarbiya, Revista de Investigación e Innovación Educativa*, (49), 73-85. https://doi.org/10.15366/tarbiya2021.49.005

Sætra, H. (2020). A shallow defence of a technocracy of artificial intelligence: Examining the political harms of algorithmic governance in the domain of government. *Technology in Society, 62,* 101283. https://doi.org/10.1016/j.techsoc.2020.101283

Santiago, E., Brown, C., Mahmoud, R., y Carlisle, J. (2020). Hermeneutic phenomenological human science research method in clinical practice settings: An integrative literature review. *Nurse Education in Practice, 47,* 102837. https://doi.org/10.1016/j.nepr.2020.102837

Savulescu, J., y Persson, I. (2019). ¿Preparados para el futuro? La necesidad del mejoramiento moral. (I. Ramia, Trad.). TEELL. Zaragoza

Sharifnia, A., Fernandez, R., Green, H., Alananzeh, e Ibrahim. (2022). The effectiveness of spiritual intelligence educational interventions for nurses and nursing students: A systematic review and meta-analysis. *Nurse Education in Practice, 63,* 103380. https://doi.org/10.1016/j.nepr.2022.103380

Sohail, S., Farhat, F., Himeur, Y., Nadeem, M., Madsen, D., Singh, Y., . . . y Mansoor, W. (2023). Decoding ChatGPT:

A taxonomy of existing research, current challenges, and possible future directions. *Journal of King Saud University - Computer and Information Sciences, 35*(8), 101675. https://doi.org/10.1016/j.jksuci.2023.101675

Stilwell, P., y Harman, K. (2019). An enactive approach to pain: beyond the biopsychosocial model. *Phenomenology and the Cognitive Sciences, 18*, 637–665. https://doi.org/10.1007/s11097-019-09624-7

Teixeira Pinto, C., y Pinto, S. (2022). From spiritual intelligence to spiritual care: A transformative approach to holistic practice. *Nurse Education in Practice, 47*, 102823. https://doi.org/10.1016/j.nepr.2020.102823

Torralba, F. (2022). Espiritualidad y transhumanismo, autotrascendencia y humildad óntica. *Revista De Investigación E Información Filosófica, 78*(298), 503-513. https://doi.org/10.14422/pen.v78.i298.y2022.011

Torralba, Francesc (2010). *Inteligencia espiritual.* Barcelona: Plataforma.

UNESCO (2022). (Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura). Recomendación sobre la ética de la inteligencia artificial. https://unesdoc.unesco.org/ark:/48223/pf0000381137_spa

Walker, S., Double, K., Kunst, H., Zhang, M., y MacCann, C. (2022). Emotional intelligence and attachment in adulthood: A meta-analysis. *Personality and Individual Differences, 184*, 111174. https://doi.org/10.1016/j.paid.2021.111174

Zhang, C., y Lu, Y. (2023). Study on artificial intelligence: The state of the art and future prospects. *Journal of Industrial Information Integration, 23*, 100224. https://doi.org/10.1016/j.jii.2021.100224

Zhang, J., Wang, Y., Wu, C., y He, J. (2022). The relationship between emotional intelligence and eating disorders or disordered eating behaviors: A meta-analysis. *Personality and Individual Differences, 185*, 111239. https://doi.org/10.1016/j.paid.2021.111239

DECLARATION OF CONFLICT OF INTEREST
The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION
Conceptualization: Fernando Antonio Zapata Muriel, Santiago Montoya Zapata and Diego Montoya Zapata.
Formal analysis: Diego Montoya Zapata, Santiago Montoya Zapata and Fernando Antonio Zapata Muriel.
Research: Fernando Antonio Zapata Muriel, Santiago Montoya Zapata and Diego Montoya Zapata.
Methodology: Fernando Antonio Zapata Muriel, Santiago Montoya Zapata and Diego Montoya Zapata.
Writing - original draft: Fernando Antonio Zapata Muriel, Santiago Montoya Zapata and Diego Montoya Zapata.
Writing - revision and editing: Santiago Montoya Zapata, Diego Montoya Zapata and Fernando Antonio Zapata Muriel.