

## REVIEW ARTICLE

# Artificial intelligence and the human condition: Opposing entities or complementary forces?

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### ABSTRACT

In the 21st century, artificial intelligence is constituted as a force that in many ways surpasses fiction, because in a certain way it is already present in all areas of social life, from internet search engines to determine tastes and preferences in accessing digital information, to intelligent refrigerators capable of issuing purchase orders to maintain the availability of certain foods as they run out. The aim of this essay is to analyze the possible ethical, ontological and legal issues arising from the widespread use of artificial intelligence in today's societies, as a preliminary attempt to resolve the question posed in the title. Methodologically, it is an essay developed using written documentary sources, such as: Literary works, international press articles and refereed articles published in scientific journals. It is concluded, that AI have the potential to disrupt the lifestyles of civilization in general in many ways reaching, even, to alter the human condition in a negative way by changing its identity and genetic integrity and weakening the protagonist of people in the construction of their own realities.

**Keywords:** artificial intelligence in the 21st century; significations of the human condition; ethical; ontological and legal conflicts; complementary forces

## 1. Introduction

What is intelligence? Are human beings really intelligent? does humanity have a monopoly on intelligence over other life forms? Is life reduced only to e organic-biological? In order to be able to contribute assertively to the current debate on the transcendence and signification of Artificial Intelligence (AI) in the 21st century, one must at first attempt to answer these questions, emphasizing that the notion of intelligence is by its very essence semantic: Polysemic and at the same time multidimensional, hence, there is daily talk of cognitive, emotional, behavioral,

multiple intelligences and artificial intelligence, among others. Conventionally:

Intelligence is a very general mental capacity that implies ability to reason, plan, solve problems, think abstractly, understand complex ideas, learn quickly and learn from experience. Reflects a broad and deep capacity for understanding the environment, for being able to capture the meaning of things and give them meaning, or for figuring out what to do.

In saying, he argues that intelligence is shown to be the central capacity for being, doing and living

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together in domains as diverse as: Logical- mathematical domains, linguistic skills, musical talent, the intra and interpersonal and social, and, the systemic bodily dimension. For psychology and neuroscience, it is a measurable phenomenon whose development or involution is associated with phylogenetic, environmental, educational and cultural factors. In this order of ideas, the notion of AI is to some extent subsidiary to the theories and concepts on human intelligence with the particularity that now:

Specifically alludes to a technological intelligence that, although it has its starting point in the person, who is its artificial and primary cause, can function independently and autonomously from it, even surpassing in many aspects the cognitive and procedural capacities of mankind<sup>[1]</sup>.

All in all, the notion of intelligence has been reified (1) by an anthropocentric and logocentric discourse excessively uncritical that tacitly postulates the supposed intellectual superiority of humanity, without questioning its paradoxes, but to what extent are the political systems that have been historically produced and reproduced intelligent? When they are plagued by authoritarian contradictions evident in asymmetrical power relations, which subordinate the citizenry to compliance with government mandates, regardless of how absurd they may sometimes be, to what extent are the existing economic systems intelligent? When they systematically deplete non-renewable natural resources for mere profit motive and concentrate wealth exponentially in 1% of the population in developed countries<sup>[2,3]</sup>.

Perhaps artificial AI could in many aspects overcome the limitations and contradictions of human intelligence, deepening its condition of being a complementary force to it or, on the contrary, end up becoming an antagonistic factor, the future will tell. It is precisely these and similar ideas that justified the development of this essay. It is worth remembering that, in many literary or cinematographic works in the style of Isaac Asimov's *I, Robot* or *Terminator* directed by James Cameron, the AI in its robotic-anthropomorphic form enters into conflict with humanity to the same extent that it develops very

high levels of autonomy that allow these "entities" to deploy a set of decisions that may be controversial from an ethical, ontological or legal perspective.

In any case, there is no doubt that in the 21st century AI is a reality that in many ways surpasses fiction, because it is present in one form or another in all areas of modern social life, from internet search engines to determine tastes and preferences in accessing digital information, to intelligent refrigerators capable of issuing purchase orders to maintain the availability of certain foods as they run out. Therefore, the aim of this paper is to analyze the possible ethical, ontological and legal issues arising from the widespread use of AI in today's societies, as an attempt to solve the question posed in the title and as an excuse to encourage a debate on this transcendental issue.

Furthermore, this essay is divided into four but logically related, sections. In the State of the Art, an account is given of selected works that have served to shape the conception of AI and its various implications for the human condition. The second section explains the methodological procedure that made possible the interpretation and organization of the sources consulted, as well as clarifying the epistemic position of the researchers. In the third section, we are interested in resolving the proposed objective, at least provisionally, in order to arrive at the conclusions and findings of the case in the last part.

## **2. State of the art**

In accordance with the limits of the length of the scientific article genre, the following is a brief review of the different works and authors who underpinned with their contributions the theoretical and analytical apparatus of the essay and, simultaneously, served as an influence to structure this vision of AI in today's world, as a technological phenomenon that, if necessary, can contribute significantly to the process of transformation of human civilization in general in unsuspected ways.

The work of Vinuesa, et al.<sup>[4]</sup>, was important for visualizing the usefulness and versatility of AI in

modern society. In the words of the authors, AI plays an important role in the promotion of sustainable development goals, through the implementation of algorithms and software that, if supported by enough qualitative and quantitative information, can regulate and monitor the achievement of more than a hundred objectives. However, it is not ruled out that among the current limitations of this form of autonomous intelligence, there are certain gaps in the transparent handling of data, security errors and in the proper conduct of ethical standards.

Similarly, the research by André and Romy<sup>[5]</sup> shed light on the elucidation of the prerequisites for the insertion of AI in the teaching-learning processes in higher education, in the study of new business models in EdTech technology companies. In the authors' opinion, the dedication of social reality gives rise to the emergence of new business models, with impact on the market and on education.

Hence, an outstanding number of educational technology companies, known in its acronym in English as (EdTech), try to renew the traditional educational models through the systematic implementation of AI for the processing of metadata of different kinds, coming from the daily use of web search engines, among other sources, that account for the tastes and preferences of people. They conclude that uncertainty and the lack of understanding of strategic data are holding back the development of solutions and, consequently, AI is the best tool for the advancement of this type of business.

For their part, Belk, Humayun and Gopaldas<sup>[6]</sup> indicate that AI is not necessarily a novel idea typical of Western modernity, since certain ancient civilizations tried to represent, in their own way, notions similar to AI through magical and religious activities such as alchemy, thus structuring a mythical tradition in which humanity feels fascinated or fearful of the imprint of another form of alternative intelligence that comes to question its intellectual hegemony on the planet or to surpass its cognitive and procedural capabilities.

In conclusion, they point out that AI approaches

based on software (soft) or robotics (hard) can be articulated in the human person, leading to a process of transhumanism that is difficult to determine a priori. For these reasons, there is always an urgent need for the consensual construction of ethical frameworks to guide the action and design of public policies to ensure the safety and protection of human dignity in the face of the advance of AI in all dimensions of social reality. Finally, the two discursive traditions that originate around AI are assessed: On the one hand, the skeptical and cautious view and, on the other, the futuristic view that celebrates the advance of this form of intelligence without major qualms about it.

Biagini, et al.<sup>[7]</sup>, further highlight the autonomy of AI for the management, in the near future, of energy systems as a condition of possibility for the implementation of a sustainable energy park, with very little human supervision. The authors argue that the implementation of AI software and hardware can also drive a technologically evolutionary transition of humanity to a higher phase of its life cycle, with abundant renewable energy produced and distributed rationally by AI.

Of interest to the research team were the works of the controversial Hebrew historian Yuval Noah Harari<sup>[8]</sup>, which now confirm with concrete empirical evidence the predictions once made by science fiction, and even exceed them in several ways. For him, the species *Homo sapiens* is definitely in its decline and, as a result of the combination of genetic engineering, robotics and AI, another post-human or supra-human entity will emerge depending on how the phenomenon is viewed at the same time bio-mechanical and cybernetic, which would overcome the material and cognitive limitations of the human condition and, at the same time, develop its abilities and skills exponentially. In this context, he argues that:

Cyborg engineering will go a step further and merge the organic body with non-organic devices, such as bionic hands, artificial eyes, or millions of nanorobots, which will navigate our bloodstream, diagnose problems and repair damage. Such a cyborg

will be able to enjoy capabilities that will far exceed those of any organic body.

Likewise, he stresses:

A cyborg could exist in numerous places at the same time. A cyborg doctor could perform emergency surgery in Tokyo, in Chicago, and on a space station on Mars, without leaving her Stockholm office. All she would need is a fast Internet connection, and a few pairs of bionic eyes and hands. But, come to think of it, why pairs? Why not quartets? In fact, even these are super fluous. Why would a cyborg doctor have to hold a surgeon's scalpel in his hand when he could connect his mind directly to the instrument? <sup>[8,9]</sup>

There is no doubt that by conservative standards these claims may seem exaggerated and fantastic, however, even a cursory review of the history of the last century shows that dizzying scientific advances have achieved things in everyday life that were unimaginable to previous generations, such as real-time communications with people all over the world, provided by smart mobile devices with unimaginable connections to the broadband internet; the open socialization of scientific knowledge, or the new forms of work, interpersonal relationships and virtual education facilitated by Information and Communication Technologies (ICT). For this reason, Harari's avant-garde ideas of today will surely be surpassed by the future in the coming decades.

### **3. Epistemological and methodological clarification**

The authors of this paper assume that humanity will soon experience a transformation of the current world order <sup>[10,11]</sup>, caused in part by the devastating effects of the new coronavirus, as well as by the exhaustion of the political and economic models effective up to now.

As it is logical to suppose, these coming transformations will in turn drive paradigmatic changes in the structure of science, underpinning what he defines as a new rationality, as a definitive overcoming

of the limits imposed by neopositivist, at least in the domains of the social and human sciences, as a fruitful attempt to vindicate without prejudice humanistic knowledge such as philosophy, literature and art, within the framework of a unified systemic conception of scientific knowledge that, without losing rigorousness in its methodology and theoretical bodies, is simultaneously: Objective-subjective, inductive but profoundly interdisciplinary; perhaps recalling the integrity and holistic sense of knowing that identified the ancients or the Renaissance.

It is precisely, encouraged by these gnoseological positions that presage paradigmatic revolutions, where the essay emerges with force, not only as a literary genre of rupture that highlights:

Because of its formal and thematic freedom, but also because of its ideology -inasmuch as its advent came about largely as a hostile reaction to the established genres-, the essay is an exemplary case of visibility of the generic problematic. It is a borderline case, if not a blind spot, in any position taken by literary thought, which from Aristotle to the present day has been sustained on the pillars of genre theory.

Indeed, the critical essay is also a key tool of scientific discourse in general, allowing the course of a free hermeneutics with a certain originality, according to the combination of factors such as: The creativity of the authors, criticality and flexibility in the handling of sources, beyond the rigid formal standards characteristic of traditional monographs that reproduce the cognitive subordination to dominant paradigms, while somehow obliterating innovations.

In operational terms, the first step was to delimit the subject in recognition of the transcendence of AI for the present and future world. Next, a survey of written documentary sources was carried out, in physical and digital format, consisting of scientific articles located in recognized databases: Scopus, WOS and Dialnet, among others; literary works and international press articles, which beyond their differences in textuality and genre, coincide in granting an unusual centrality to AI, in its various forms and

modalities of existence. Finally, the paper was written in accordance with the rules for authors of the *Revista de Ciencias Sociales*, for its evaluation, contrasting and, if appropriate, publication.

#### **4. Artificial intelligence and the human condition: Ethical, ontological, and legal issues arising from its widespread use in society.**

When the great possibilities deriving from the widespread spread of AI in society are discussed, at least two conflicting positions on this phenomenon can be quickly observed: On the one hand, people and researchers are revealed who suppose in this form of intelligence a multidimensional tool for the improvement of the living conditions of humanity, by advancing work, processes and making decisions autonomously and efficiently according to the interests and needs of people located in their differential context. On the other hand, there is no lack of critical voices that foresee in AI the possibility of altering, for the worse, the historical course of societies in the 21st century, without incurring in anachronisms or retrograde positions.

In this thread and without falling into the fallacy of a false dilemma any reflection on the subject implies a certain position on the positions indicated and this essay is no exception. Be that as it may, AI has so far demonstrated a significant versatility to assist in the management of almost all human activities such as: Education, health, finance, recreation, house-keeping and even in the performance of some liberal professions, where technique, intellectual knowledge, creativity and experience prevail. Today, for example, applications available on smartphones such as: ADA, Idoctus and Edmundo based on AI can develop an accurate medical diagnosis of various pathologies, while others such as: *He Law Guide*. Smart leges do the same in legal matters.

However, scientists such as Stephen Hawking (did not hesitate at the time to predict the dangers of AI for the human race, arguing that: “Humans, who are limited by their slow biological evolution, will

not be able to compete with machines, and will be outcompeted” (p.1). According to the late British physicist a complete AI could also be self-designed for purposes that, depending on its rapid evolution, could overcome all anthropic controls and insurgence against people, while not denying the potential of this type of intelligence to solve a wide variety of problems<sup>[12]</sup>.

Foreseeing this situation of conflict between robotics as the ultimate material manifestation of AI and, the human condition, the celebrated science fiction writer Isaac Asimov had already in an early era formulated his three fundamental rules of robotics:

1. A robot shall not harm a human being or, by inaction, allow a human being to come to harm.
2. A robot shall do or perform the commands given by human beings, except if these commands come into conflict with the 1st law.
3. A robot must protect its own existence to the extent that this protection does not come into conflict with the 1st or 2nd law<sup>[13]</sup>.

From reading between the lines of these rules or laws that emerge from the short story *Runaround* originally published in 1942, it is inferred that the destiny of every robot is to subordinate its actions to the orders given by human beings and to see to it, therefore, that people do not suffer any harm even at the cost of their own existence, under the categorical premise No. 1.

Otherwise, Asimov raises the beginning of the ethical debate that sought to regulate from the domains of literary fiction the exercise of AI praxis in order to avoid any conflict or tension of these nascent entities with humanity. Indeed, this ethical concern would figure prominently in his major works: *I, Robot*; *Bicentennial Man* and the *Foundation* saga.

There is no doubt that AI, in all its expressions and modalities, is susceptible to ethical treatment, due to the risks and possibilities implied by its own existence, which is in constant development, especially since everything indicates that it is an entity that evolves dialectically, has the capacity to act autonomously and to learn and self-model itself based

on its own individual and collective experience at a pace that exceeds human capabilities. In fact, select circles such as the Bilderberg Club include in their agenda of international debates the paradigm of AI as a transforming force of modern societies which has generated a set of conspiracy theories in social networks.

At this crucial point it should be clarified that ethical reflection, following is the philosophical concern that enters the exercise of individual freedom that opts for the pursuit of good living, with all that this represents from the moral perspective. Similarly, the vision of the problems arising from the exercise of freedom is subsidiary to Fromm's humanistic ethics<sup>[14]</sup>, for whom all ethical reflection is also based on a formal and material criterion that links the praxis of concrete persons with general or particular, utilitarian or dogmatic moral precepts, based on the principle that it is man's conscience by itself that can determine the criterion of the virtue or vice of his actions and not necessarily an authority that transcends it, which bets on the promotion of the self-determination of the will without the need for coercive forces external to it, such as the State or religion.

In both cases, Sy Fromm<sup>[15]</sup> will tacitly consider that the human person is, in essence and existence, the only being endowed with consciousness and will capable of acting freely and, consequently, justifying ethical treatment. Despite these anthropocentric positions that have governed the matter so far, the development of AI questions the dominant paradigm for which intelligence is an exclusively human attribute and life is reduced only to its biological essence, which makes possible at least theoretically a much more meaningful post-human ethical debate in the decades to come, to the same extent that all doubts are dispelled about the particular will and consciousness of AI, to be and to do based on the hardware and software conditions that determine its own existence and its autopoietic force.

Without further do, what would be from now on the main ethical issues that may arise directly or indirectly from the spread of AI to all dimensions of

social life? At this point it is worth remembering that, just as the first industrial revolution meant the massive loss of jobs when men were replaced by cheaper and more efficient machines, it is very likely that in the next telematic and nano-robotic revolutions that will have AI as a leading factor, the situation will not be very different from what happened in the Age of Enlightenment and the results in this sense will be more dramatic, since these entities have multiple uses in almost every conceivable field.

In the scenario described, we are facing an event that materially alters the principle of the political ratio, as he understands it, because a new world order dominated by AI, as a material practical reason, would not only not deal with the conditions that determine the production and reproduction of good life for humans, but also now introduces a force external to humanity in key processes for the maintenance of the balance of the political and social ecosystem, such as the production of goods and services, the distribution of value goods and the social division of labor and knowledge.

It could be argued that the imprint of AI would bring about the reduction of working hours for the benefit of individuals and entire communities, increasing in parallel the spaces for recreation, family coexistence and training, and that, likewise, the losses of potential jobs coopted by intelligent machines will be remedied by a public policy that would guarantee a general basic income for all people, similar to the experiences of social security in the framework of the welfare state after the Second World War. However, all historical evidence shows that in the global south these policies have always been insufficient and limited and would not guarantee in any case the necessary resources to achieve a life above poverty and precariousness, arguing otherwise would be illusory or demagogic.

If we add to this the fact that the great benefits of AI will probably be monopolized by the political and economic elites, as happened in Latin America with the various modernizing programs, which even today have been unable to provide definitive solutions to the poverty, inequity and lack of opportunities for the

great majorities in the region to underpin their development, then AI would rather increase inequalities and the mechanisms of social exclusion because it would provide a few with a set of relative advantages, to the detriment of those who do not have access to the enjoyment of these technologies.

Also, AI will further empower the formal and informal social control mechanisms of authoritarian governments, to deterioration of the spaces of democratic participation and citizen leadership historically achieved through arduous struggles all over the orb. If this statement is exaggerated, it is enough to examine how the social network known as the Social Credit System, which combines facial recognition software, real-time geolocation and AI, has worked so far in China to reward or punish people with a scoring scale that can, in certain cases where “the ideological purity of the system” is undermined, lead to a ban on leaving the country, traveling on trains or opting for a bank loan

As an epiphenomenon of the ethical question, a series of ontological problematics is also visualized, which it is interesting to review in a rough way. Ontology, in this case, refers to the search for the ultimate meaning that defines the human being in his intrinsic dignity. From this point of view, the human being or person has historically constructed his condition of being, not only as a result of the categorical imperatives of his biology, but especially, of the intersubjective action of attributes such as intelligence, will, the capacity to cooperate that characterizes the species and culture, as a force of constant reorganization of nature.

Indeed, the main ontological problems deriving from the general use of AI in today’s world are those that are modulated by its primary effect to transform the human being in the future into a different entity, which cannot be fully determined in its essential characteristics and ethos at this time. If Harari<sup>[8]</sup>, is right in his prospective vision, the Homo species is already experiencing its biological and material decline, a phenomenon that brings with it more questions than answers: Does the merger of AI with humanity subvert the human condition? What are the

ethical limits of any evolutionary process? Is the new being that emerges from the combination of genetic engineering, nano-robotics and AI necessarily unacceptable? Already in the late 19th century, the great German thinker Friedrich Nietzsche sentenced that:

Man exists only to be overcome. “Man is a rope stretched between the beast and the superman a rope over an abyss”. Hence his greatness lies in the fact that “he is a bridge and not a goal” and that what is to be loved in him is “that he is a transition and a sunset”.

Perhaps the development of technology in general, and of AI, is the power that will drive the ultimate overcoming of the human person, as it has been known ontologically up to now. Or perhaps, this integral overcoming of Homo sapiens coincides with what Nietzsche imagined as the transition from the beast to the superman and, incidentally, to a complex crossroads in which the decline of humanity or the evolution of its capabilities to levels of the gods is debated, as assumed by Nietzsche<sup>[15]</sup>.

To be sure, nothing is certain and one can only speculate about it, but in any scenario the transformations that will materialize in the coming decades will not be easy and bring with them changes in people’s identity and may transform their genetic integrity and, therefore, significantly alter their being, doing and living together with the way they feel and live their life worlds, which is fixed at all times by the limitations and subjectivities inherent to the human condition at this stage of its historical development.

Finally, AI requires at every moment the reproduction of a set of laws that test legal knowledge in its ability to regulate and regulate in the present and future, the design, production and use of AI. At this point, he highlights the close relationship between biotechnology, law and bioethics, given the accelerated development of technology in the fields of information technology, medicine and genetics, to safeguard the identity of individuals and their integrity and genetic identity.

Again, at this point, legitimate questions arise such as: the person genetically tailored to achieve

certain genotypic and phenotypic attributes contravenes the natural evolutionary course of the species, advances gestures will divide humanity into two groups: “normal” people and those gifted by genetic manipulation and/or biomechanical implants? Although there are no definitive answers to this question, it is already clear that the developed nations will be the most favored by these improvements, which will further reinforce the technological and scientific gap between the North and the South.

Since the advent of the philosophical program of political modernity, as stated by; underlying the legal systems of the West is an idea of justice, democracy and equity that, through symbolic and conceptual devices such as: The rule of law and human dignity, seek to protect ordinary people from situations that violate their ethos or deteriorate their living conditions. In this sense, the production of normative bodies generated to regulate AI should focus on at least 4 crucial aspects, which are already visualized:

A. Consensually develop an international legislative framework that subordinates the design, production, and development of AI to the dignification of life in its biological typology. As postulated by Asimov’s first law of robotics.

B. Set universal ethical and axiological principles that give meaning and purpose to AI as a tool at the service of the development of human capacities, as understood by Nussbaum<sup>[16]</sup>, that is, as incommensurable possibilities of being and doing within the framework of a life project, elaborated from individual sovereignty.

C. Penalize the instrumentalization of the human condition by the fusion of AI technological implants, which transform consciousness and/or obliterate people’s ethical criteria for being and doing freely.

D. Punish the use of AI as a formal and informal social control device to underpin a totalitarian order, in the style of dystopian fictions such as *Black Mirror*, Aldous Huxley’s *Brave New World*, or George Orwell’s 1984.

The success of a legislative agenda of this nature will depend not only on the political will of advanced governments to make good use of AI, but also on the pressure exerted by organized civil society to defend its rights in a substantive democracy for which it would be unacceptable for AI to gradually become a domination device, regardless of its multiple performance possibilities present in all kinds of technological devices.

## 5. Conclusions

AI and the human condition are inexorably debating whether to be “opposing entities or complementary forces? Essentially everything will depend on the general use that people make of this technology, the purposes for which it is designed and the concrete results obtained from it for the benefit or deterioration of life in general, of course, if humanity can keep this form of intelligence under control under certain ethical and bioethical standards in the triangle that combines AI, robotics and genetic engineering. So far, AI could apparently in many aspects overcome the limitations and contradictions of human intelligence, deepening its condition of being a complementary force to it.

However, it should not be ruled out a priori that at a certain point in its evolution, AI, in its various forms of existence, may come into conflict with humanity as it develops very high levels of autonomy that allow it to make a set of decisions that may be controversial from an ethical, ontological or legal perspective. Either as a result of its own conscious will or because of its use as a tool for social control and domination, as is already happening in countries such as China, where AI is at the service of an autocratic order.

For the reasons alluded to throughout the text, in the face of the two argumentative positions on AI that visualize it: On the one hand, as a tool for the improvement of individuals and collectivities for the future or, on the other, as a force that must be critically analyzed because of the various threats that directly or indirectly arise from its use, the option leans toward the second position without detracting



from its multiple contributions to modern life. Everything indicates that, in the new world order that is being structured, AI will occupy a central role that could well augur the transition of man to a qualitatively superior entity or, on the contrary, to the moral erosion of the human condition. From this perspective, there are more questions than answers and good reasons to be cautious about what lies ahead in this stage of global transition.

Moreover, AI is such a broad and complex subject that it always demands an interdisciplinary study that addresses it in its various dimensions, as a condition of possibility to understand the phenomenon in its dialectical totality. To this end, it is not unreasonable to propose more and better lines of research that account in theory and, for the ethical, ontological, legal, political, psychological and anthropological problems arising from the increasingly widespread use of this technology.

## Conflict of interest

The authors declare no conflict of interest.

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