Proceeding Paper

Is AI Capable of Generating an Ethic to Save the Planet and Contemporary Society? †

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Abstract: Humanity today has high expectations and hopes for the use of artificial intelligence on a large scale. Is AI capable of generating an ethic to save both the planet and contemporary society? The current paper paints a picture of the society of the future and the great changes that will occur due to the explosive development of new information technologies; it argues the reasons why ethics will have to be further formulated in the social context by involving transdisciplinary communities of specialists. The analysis was made based on the results obtained regarding the state of the art in science, technology, and engineering, and is based on the inability of communities to incorporate and make optimal use of innovations. At the same time, it aims to develop the ethical principles that underlie further development.

Keywords: artificial intelligence; ethics; community; posthumanism

1. Introduction

Knowledge in contemporary society has become a meta-theme, generating technological development, intuition, and conceptual changes. In this context, we increasingly try to address the problem of developing ethics and morality, of respect for the person standing beside us. We see pride, indifference, and evil daily on both a social and global scale. Our actions are mostly focused on competition, on having something, moreover, without looking around us. All these traits define a sick society that contrasts profoundly with the inclusivity that knowledge offers to humanity.

In this context, new technologies are developing exponentially, and communities are failing to incorporate and use these resources efficiently. The year 2018 was the moment when artificial intelligence (AI) showed humanity that it can be decisively involved in changing the world. However, simulating behavior through artificial intelligence does not require that the structure involved in the simulation be intelligent, or conscious, or even have access to consciousness. Thus, there appears a new, virtual environment, capable of making complex analyses and replacing the human element in making decisions. With the advent of the first Industrial Revolution, physical force was externalized, then machines took over the routine intellectual labor and humanity turned their attention to understanding the world, to information, seen as a fundamental ingredient along with energy and matter. Artificial intelligence triggered the process of metamorphosis and the perception of life through the senses, through what is tangible, through everyday life. We transfer to the machine an artificial, redefined replica of human intelligence as we understand it today, inventing concepts, algorithms, and notions, prompting a profound metamorphosis in society, generating changes in meaning and value. The virtual environment allows us to move from object to subject, from data to information; we digitize everything so that the machine has access to everything we can offer it. In these conditions, a reformulation of concepts such as ethics is required today, and we wonder if we should transfer this process to artificial intelligence [1].

Due to the need for skills transfer between biological and digital forms, the coupling between driving intelligence and machine-generated thinking is an increasingly sophisticated phenomenon as artifact construction evolves, and so, three important aspects of this process arise: the need to generate new intelligent forms, how we manage to teach these new forms of intelligence, and from what ethical perspectives they will be able to work. Artificial intelligence, developed and formed by human intelligence, will generate a new environment, with implications for the restructuring of society, not only in community in general, but also in our individual way of being.

The word "intelligent" not only refers to flexible and rapid thinking and the ability to solve a problem based on mathematical algorithms but also involves the ability to learn continuously, access information, and use its findings when making decisions. Intelligence, in the modern sense of the term, requires fairness and speed in solving a problem, but it does not analyze the nature or timeliness of the problem itself, which brings into question the issue of ethics [2]. Intelligence is required today in the sense of allowing the subject to react to the environment, not in the sense of acting appropriately in the context of ethical concepts. However, in the context of the lack of synchronization between the comfort and basic needs of humanity and natural imbalances, collapsed ecosystems, and the threat of species extinction, new technologies structuring artificial intelligence could provide humanity with sufficient tools and technologies to ensure further development in a planetary quasi-harmony. What will this future, based on artificial intelligence, look like?

2. AI in the Society of Tomorrow

Globalization, which probably started with the advent of agriculture and continued with the spread of the great religions and the development of trade, today brings uniformity in terms of access to information, education, and civilization. Today, public policies that are focused on sustainable development are defined, as perceived by the political elite. If, until recently, we were talking about the society of the future, today we must talk about the society of tomorrow. If the future starts tomorrow, we must also talk about the new professions that will be a part of tomorrow, along with the communities of tomorrow. Being unprepared, we will have to improvise something in the face of the avalanche of problems that we will all call chaos.

Today we all have a phone in our pocket that is connected to the internet, but many are afraid that we will soon become cyborgs, without realizing that we already have been for some time. We talk about posthumanism, generating fears about how people will abandon reality and formal thinking, taking refuge in an artificial environment wherein any idea is possible and where the truth becomes relative and takes various forms. Achievements in recent years in the fields of communications and artificial intelligence will radically change the lives of the human communities of tomorrow. Certainly, in the coming years, we must expect major changes in our daily lives, and especially, changes in society. Here is the future that awaits us tomorrow:

♦ Communication develops over multiple applications and channels; we will be connected directly to the cortex, and we will express ourselves more easily as faster, more natural, verbal, and written communication will lose ground to new multimedia communication channels and new forms of illiteracy will appear. We will experience easier and more efficient communication between people, based on new skills; new communication channels will be developed (some being gestural), to interact with all the intelligent elements around us. Transhumanist ideas and concepts, based on the technological improvement of abilities and skills, will greatly influence the lives of human individuals. The concept of posthumanism (the death of the classical form of humanism) will lead to the needs of the individual to be better, to enjoy what one likes and wants as much as possible, to be able to do things easily, quickly, and well, accelerating the human metamorphosis into a cyborg as a result of advances in neuroscience, nanotechnology, medicine, and communications.

♦ The computer, as we know it, will disappear. It will dissipate and merge with the things around us. Everything around us will become smart: our pen, coffee cup, chair, bed, window, car, house, sidewalk, or even city. All this technology will bring comfort and prosperity but will correspondingly increase the degree of cyber insecurity—all these smart devices, which will communicate with each other, will need to be accessed via a user ID and password. Because it will be impossible for us to memorize so many access codes, new mechanisms will surely be developed to ensure the security of our access to our sphere of interactions. We will live in an augmented world, one in which the virtual will complement the reality around us permanently, facilitating our daily activities and access to knowledge.

♦ Major changes will be made in all areas of activity: education will be customized to fit the potential, aspirations, and needs of every participant, and the teacher will be the one who guides personalized learning via small and complex groups [3]. Experienced throughout a person's active life, education will organically combine the fields of science with those of technology, engineering, art, and computer science through new teaching and learning methods. These will be based on experiences, emotions and deep knowledge, social integration, care for nature and for the universe. The needs of the community will intertwine with the desires of the individual. There will be substantial discrepancies in society that will gradually differentiate, on a large scale, between curious people who will want to explore the mysteries of nature through science, creative people, will be those who work for the development of culture, knowledge and humanity, while other people will indulge themselves and just want to enjoy all that the virtual environment offers them easily, immersing themselves in a vast array of information and looking for something to give meaning to their own level of functional illiteracy.

♦ In terms of health, diagnoses will be given by artificial intelligence, based on investigations made via sophisticated equipment; treatment and surgery will be customized for each person by robots. The field of health will be perhaps the most important area of development, will accumulate novelty and interest at all levels, and will probably be, along with the fields of ecology, biotechnology, bioengineering, and synthetic biology, the most major area of interest and concern [4].

♦ In the legal field, contractual documents and judgments will be made using artificial intelligence; management roles in companies and communities will be performed by computers capable of adapting to economic, legislative, market, and personnel issues.

♦ In the field of law, the notion of the electronic/virtual person will appear, necessitating its own, adequate legislation, based on the electronic signature in its different forms (biometric, electronic, virtual, etc.).

♦ In the economy, we will move over to virtual currency with everything that it involves: an electronic wallet and electronic payment without a card. However, financial management will be performed by intelligent, self-adaptive information systems.

♦ Prototyping systems (3D, 4D printers, etc.) in homes and offices will be the basis for the instant supply of remote products; the idea of a virtual store will change because it will not trade products but instead computer packages for prototyping systems or services.

♦ The diet will be increasingly based on artificially produced food (replacing meat and other organic products); meals will be carefully apportioned in terms of nutritional content and quantities and will offer the most diverse culinary experiences, with computer systems customizing a specific menu for each person, depending on their age, activities, possible diseases, compliance and, of course, preferences.

♦ There will be an increasing emphasis on intellectual property, creativity, and intangible values (virtual and intellectual) to the detriment of material values; dematerialization in time and space will completely change and customize a person's daily schedule, how one will carry out activities during the day and how one will relax or carry out professional activities [5].

◆ Data mining will allow access to metadata and complex analysis, which will increase the person's cyber security and accentuate his or her personality. Increasingly complete and complex information will be very clearly delimited by law to ensure the integrity and protection of the individual. The areas of ethics and cybersecurity will evolve greatly, becoming increasingly important at all levels of society and communities, and political platforms and debates will be replaced by ethical platforms and debates. Decisions will be made by considering first the impact on the community, then on the environment, and will only take into account income or other benefits at the end of the process.

◆ The concept of human resources will be transformed into that of intelligent resources, becoming dominated by the elements of artificial intelligence, following the argument that people will live their life as they want, seeking permanent access to entertainment, personal development and, only if they want, being actively involved in community activities. The notions of gender, race, population, and ethnicity will disappear in society, from all fields of human activity. Major social movements will exist in communities, generated by resistance to the new developments and the refusal of continuous adaptation, due to crises and the speed of technological progress. Value judgments will be evaluated according to the level of professionalism of the person (physical or electronic) who will issue them, and in the virtual realm, for each piece of information, there will be an assessment of the level of trust depending on who posts and who accesses that information. The physical activities of community members will be less and less and will require an adaptation of the human body to sedentary life, which will change the body configuration and the management structure of staff involved in activities.

◆ Reality will combine with the virtual world, tourism will be predominantly virtual, simulating and enjoying all our senses. There will be digitally coupled artistic expressions all around us. Imagine a window as a theater stage, presenting a showcase of music, augmented visual arts and flavors, an interactive and interconnected show with people who are present on both sides of it, a show constantly adapted to the traffic and human behavior of those present, the time of day and the calendar or calendar date.

◆ Rather than houses, people will live in closed environmental structures that will ensure a pleasant and comfortable environment that is specially designed and protected from the climate change that will occur in the coming years. Contact with nature will be very rare and will be an experience that people will cherish. The individual's relationship with the notion of ownership will change. Large cities must produce the energy they need on their own and drastically reduce their emissions.

Science will remain the foundation of everything in the universe, not only in the world but also around us and in our minds. Politics remains outdated, without the power to realize medium- and long-term scenarios, implementing at a country level numerous public import policies that are not adapted to the communities they serve. The management of each locality will become collaborative. The social network will reinvent the usual things and industries will become more creative in their entirety. Cyber security and ethics will be given much more importance than they have today. Many new professions will appear, but the majority of professions will be transferred to machines—except for creative activities, which are difficult to simulate and model by artificial intelligence. Nothing will be as it was; of course, there will be nostalgia, but only those with a strong psyche will survive in a society always driven by the need for rapid and forced adaptation. Humans and nature will learn to survive in these new conditions, but we will succeed. We will learn to live in balance, always disturbed by all kinds of crises, but the human race will be able to move on, in better conditions of civilization and comfort; we will switch to sedentarism and a less active lifestyle, and thinking will progress continuously regardless of level, whether it is by a man or a car. "Behavior will be a consequence of the level of personal development and not of a set of rules stated and, at most, mechanically learned. The survival of the human

being is conditioned by a change of mentality, of lifestyle, of assuming some ethical values and of assimilation of some knowledge regarding the coevolution of Man–Nature seen from an inter- and trans-disciplinary perspective" [6]. Is all this just a dream?

3. Conclusions

The development of ethical principles on Artificial Intelligence is in its initial stages and will continue to develop. Humanity cannot yet fully embrace new technologies and the advances made by science; it does not understand their meaning and usefulness, so it cannot determine what is useful and what is not ethical. Artificial intelligence is increasingly utilized and opens up new horizons of applicability, which will have an impact that is difficult to assess at present. However, the extraordinary results obtained by artificial intelligence today in terms of critical thinking (accessing information, data processing, making the right decisions, learning, and adapting) do not reveal new perspectives in the field of creative thinking. Creativity is closely linked to intellectual property, innovation, invention, artistic creation, and new, pleasant, and useful ideas. It is impossible today to artificially reproduce creative, emotional, and social intelligence. Of course, artificial intelligence today allows a reformulation of concepts such as ethics, but it would not be a good idea for the same artificial entity to structure the ethical principles of its own activity. Today, ethics is probably the main weakness in science, technology, and engineering, but its development will have to be achieved through social dialog between those who define it, those who generate progress, and those who will use it, with a long-term echo of its effects on humanity and man's relationship with nature.

We believe that ethics and morality (as human values) are not learned but are instead generated in the community; they are acquired through social development, through an awareness of universal values, and through knowledge and assumption, so we cannot transfer them artificially. Artificial intelligence could make analyses and present findings, it could highlight concrete situations through complex simulations and modeling, but ethical behavior involves a leap of consciousness that is formed by education, from the Individual (individualism, separation from the world and maximizing pleasures) to the *Person* (awareness of the value of life, community, life, and future).

Intelligence alone can generate neither science nor ethics. It has allowed us to dominate the material world and to generate the virtual world. Technology or scientific discoveries are not inherently "bad", but they can be misused. These are the fruits of the human mind that tries to explain the laws of matter; by intelligently combining them with creativity, humanity has built an artificial world in which we continue to evolve.

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