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ARTIFICIAL INTELLIGENCE AND HUMAN RIGHTS IN MEXICO: CHALLENGES AND OPPORTUNITIES

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Abstract: Artificial intelligence (AI) has gained significant relevance in contemporary society. Today, everyone interacts in some way with systems that optimize processes, from paying for parking to generating electoral statistics. This paper examines how AI must operate within ethical and legal boundaries, harmonizing these parameters to improve human interaction and foster a full life; and, in addition, focuses on Mexico as a case study. Thus, it is essential that AI promotes freedom and respect within an adequate legal framework. State authorities have the responsibility to update and adjust regulations to reflect the reality of current Mexican society. Furthermore, the lack of a specific regulatory framework in Mexico presents risks for the protection of human rights, especially regarding privacy and individual autonomy. Therefore, it is essential that authorities must review and update laws to ensure that AI benefits society. Cooperation efforts between government authorities, universities and researchers, as well as civil society, prove to be decisive in carrying out public policies to protect human rights and promote respect, equity and tolerance.

Keywords: Independence, data, openness, technological developments, human dignity, neural structures, state agencies.

INTRODUCTION

Contemporary society has witnessed remarkable advances that have influenced not only people's lifestyles, but also the standards of conduct established by the State to improve social interaction. An example of this is the recognition of human rights, enshrined in international instruments such as the Pact of San José de Costa Rica (American Convention on Human Rights, 1969), which promote human dignity and the right to freedom of thought and action, based on individual autonomy.

In this context, the right to freedom of thought has allowed people to use their ability to reason and act, finding solutions to problems through systems designed to facilitate efficient interaction. What began as an effort to decipher codes during World War II has become an essential tool for improving human relations, giving rise to artificial intelligence systems that address global problems and offer computer solutions.

Scientists and technologists work tirelessly to develop tools that expand the scope of artificial intelligence, replacing human functions with objects capable of solving problems. However, this poses risks for humanity, which requires government authorities to reflect and act appropriately.

This text offers the reader the possibility of exploring the origin and practical utility of artificial intelligence, analyzing its development and the impact it has had on daily life. Subsequently, the concept of human rights and the pro persona principle are introduced, as enshrined in the highest legislation of the Mexican legal system.

This will allow us to understand the importance of recognizing the human rights inherent to all people and the duty of the State to guarantee their protection.

Next, the impact of artificial intelligence in relation to human dignity is examined, based on the premise that the human being is valuable by its very nature. People have the ability to communicate, think, reason, discern, study and even transform their environment. These skills have been enhanced by study, commitment, dedication and intellectual evolution, which has allowed the innovation and creation of artificial intelligence systems.

Faced with this scenario, the State must assume one of its most important functions: guaranteeing order and organization in the interaction of the population that composes it. To do so, it is essential that the State create

and adjust regulations so that they align with the way, form, and circumstances of life of its citizens. The last section of this document addresses the challenges and opportunities that Mexican authorities face in the face of the advance of artificial intelligence and the need to create or adapt such regulations. The objective is to ensure unrestricted respect for human rights and the protection of human dignity, always remembering that people are the ones who create and structure artificial intelligence systems. These systems must act only as assistants to solve social problems, without damaging the essence or affecting human nature.

ORIGIN AND PRACTICAL USEFULNESS OF ARTIFICIAL INTELLIGENCE

Before delving into the topic of artificial intelligence, it is important to address the concept of intelligence, an ability that characterizes human beings. However, some argue that intelligence is also present in the animal world and even in simple organisms (Sigman & Bilinkis, 2023, p. 49). This indicates that it is not exclusive to people, although it is attributed to the human capacity to understand, reason, learn and solve problems, closely linked to intellect. Through intelligence, knowledge, culture and social behaviors are acquired, in addition to being related to memory and reasoning.

The term intelligence comes from the Latin intelligentia, which refers to the ability to understand, assimilate, choose and delimit. This definition supports the idea that intelligence extends to other living beings, such as monkeys, chimpanzees, dogs and felines that, after training processes, develop skills and abilities to perform certain actions.

Etymologically, intelligence is derived from two Latin terms: intus (between) and legere (to choose). Thus, intelligence is understood as the ability to choose, allowing a person to opt for the best solution to a problem.

The Royal Spanish Academy defines intelligence as the ability to understand, solve problems, and acquire knowledge and understanding (Royal Spanish Academy, 2024). Various disciplines such as psychology, pedagogy, biology, education, and genetics address intelligence, generally from a human perspective.

Although it is easy to talk about intelligence and compare levels between people, defining it completely presents challenges. For this reason, physicist Gerry Garbulsky points out: "We are not smart enough to define intelligence" (Sigman & Bilinkis, 2023, p. 47).

In relation to human intelligence, it is understood as the ability to make decisions, learn, acquire knowledge, and appropriately to face problems and propose solutions in one's environment. In a deeper sense, intelligence is identified as the capacity for cognitive development to solve new problems, implying the development of analysis, synthesis and generalization processes (González Serra, 2024). It is also related to genetic inheritance, suggesting that its level can be measured and perfected according to the social and cultural context of the person. The brain, where numerous processes occur, is the main organ studied to determine the degree of intelligence, allowing people to solve problems, improve their quality of life and innovate in their interaction with the world.

Throughout history, intellectual development has given rise to artificial intelligence, which emerged thanks to the creativity of thinkers and scientists from different eras who invented tools to facilitate coexistence and improve the status of life in society.

Artificial intelligence is defined in various ways. According to the Journal of Artificial Intelligence, Ethics and Society (Sabater

and De Manuel, 2024), it is described as the ability of a computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. It also refers to the development of computer systems capable of performing tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and language translation. In addition, artificial intelligence systems are identified as software designed by humans that, when faced with a complex objective, act in the physical or digital realm by perceiving their environment, acquiring data, and deciding on the best action to achieve said objective (Sabater and De Manuel, 2024, p. 14).

It is important to note that artificial intelligence allows humans to equip objects with capabilities to help solve problems and perform tasks that were previously exclusive to people. Thanks to the advances of scientists interested in facilitating interaction with the social environment and in applying their intellectual capacity, tools have been created that perform functions previously attributed only to humans.

Artificial intelligence manifests itself in various objects, such as electronic computers, computers, smartphones, systems, robots, and chatbots, which operate using codes and use digital information. These devices are developed by experts with extensive knowledge in systems engineering, physics, electronics, mechanics, and other areas that contribute to the advancement of the capabilities and tasks of instruments designed to operate with artificial intelligence.

The origin of artificial intelligence dates back to the 1930s, with Alan Turing as one of its main pioneers. Together with Dillwyn Knox, Turing led a team of scientists, including physicists and mathematicians, at Bletchley Park. Their mission was to decipher the Nazi codes generated by the Enigma machine,

which encrypted messages using a gear system based on three rotors that transformed each letter (Sigman & Bilinkis, 2023, p. 13). Although Turing's work contributed significantly to the end of World War II, the participants were unable to reveal their work, leaving a veil of mystery over this epic story (Sigman & Bilinkis, 2023, p. 15).

Over time, this effort has driven unexpected breakthroughs, structural changes, and new forms of human interaction, giving rise to artificial intelligence. Turing's first step was to analyze his own reasoning in order to understand and apply it to a machine, with the goal of emulating and replicating human intelligence (Sigman & Bilinkis, 2023, p. 16).

The British Alan Turing, recognized as one of the pioneers of artificial intelligence, worked tirelessly to understand the development of human intelligence. He used chess, which he considered a metaphor for human ingenuity (Sigman & Bilinkis, 2023, p. 16), as a tool to explore human intellect. After years of study, in 1950, Turing developed the famous Turing test, posing the question: can machines think indistinguishably from humans? (Sigman & Bilinkis, 2023, p. 17). This test consisted of an exercise where an interviewer had to determine which of the two participants, one human and one machine, was the human being. Unfortunately, Turing died on June 7, 1954, which cut short his research and discoveries in artificial intelligence.

Another milestone in the origins of artificial intelligence is Eliza, a program considered the first conversational bot in history. Eliza interacted in writing with her interlocutors, trying to give the impression of understanding their problems and concerns (Sigman & Bilinkis, 2023, p. 22). Although innovative and attractive, Eliza had the limitation of not being able to memorize or learn from conversations. However, the subsequent use of neural networks, which

establish relationships between objects and their representations in specific groups of neurons, allowed the development of deep learning, reaching a level of abstraction with characteristics of human intelligence (Sigman & Bilinkis, 2023, p. 25).

Neural networks are perfected by operating without explicit instructions from the human mind, training themselves through patterns of neural connections that make them effective, a process known as feedback. This mechanism is a simplified version of reinforcement learning, fundamental for both human and artificial intelligence (Sigman & Bilinkis, 2023, p. 27). Neural networks solve problems by identifying and evaluating their components, selecting the best option to solve them. This process is complex for the human mind, since the neural network must define a value function that indicates what to maximize, which can be enigmatic.

The reinforcement learning algorithm tackles this task effectively: once the goal is set, the artificial intelligence figures out how to achieve it (Sigman & Bilinkis, 2023, p. 28).

significant advance in This artificial intelligence allows machines, without knowing how, to collaborate quickly and effectively in solving problems and improving human interaction. In this context, the central processing unit (CPU), which manages the information from the chips of several computers, and the graphics processing unit (GPU), which performs calculations in parallel and supports the video game industry, are integrated into the global computer network. This network groups together human-produced data, feeding neural networks at an extraordinary speed and further strengthening what we know as artificial intelligence.

Another emblematic system of artificial intelligence is AlphaGo, which revolutionized and enriched the way we humans play. Its

origins lie in the board game Go, which emerged in China and is known for its ability to generate new strategies by studying a vast repertoire of human games (Sigman & Bilinkis, 2023, p. 31). In 2017, AlphaGo was surpassed by AlphaZero, a system that learned to play without prior teaching, facing a copy of itself. In this process, only one of the copies could revise its game model. After thousands of games, the version that could learn began to consistently beat the other. This improved version was then cloned and the cycle was repeated (Sigman & Bilinkis, 2023, p. 32).

Alpha Zero stands out as an artificial intelligence model that generates knowledge exponentially, allowing it to process and distribute large amounts of information in thousands of a second to address various problems. It uses neural networks that recognize and abstract images, sounds or phrases, which gives rise to the creation of generative networks that incorporate imagination and creativity.

This way, machines manage to solve problems and respond to human needs, thanks to the information and elements provided by their creators. These systems, developed by humans, are integrated into communication through language, the abstraction of ideas through observation and selection, and decision-making based on computer systems.

The origin of artificial intelligence is relatively recent. However, its evolution has been exponential, which has allowed significant advances in various fields. Thanks to artificial intelligence, waiting times on public transport can be reduced, access to medical care can be improved, strategies can be developed to adapt to climate change, healthy food production can be increased, and energy-efficient buildings can be designed (Fernández Polcuch, 2023). These advances invite us to reflect on the potential benefits of artificial intelligence, as well as on the possible

harm it could cause if the principles and values necessary for its responsible use, committed to the social environment and adapted to changes in human interaction, are ignored.

Given the above, it is crucial to continue reflecting on the impact of artificial intelligence in the field of human rights. Scientific and technological progress influences the interaction between people and can affect fundamental rights such as privacy, access to information, decision-making and the family environment. Therefore, it is essential to develop regulations that protect and expand human rights, guaranteeing a better quality of life and promoting respect, order and peace among all people.

HUMAN RIGHTS AND THE PRO PERSON PRINCIPLE

Following the statements of Dr. Miguel Carbonell, who maintains that all fundamental rights are constitutionalized human rights (Carbonell, 2019), this section highlights the importance and significance of human rights in achieving justice and equity in society. In this context, it is crucial to balance scientific and technological advances with legal regulations, creating an environment of harmony that allows making the most of innovations derived from artificial intelligence.

Human rights, understood as faculties inherent to the person and linked to their dignity, must be protected by the State to guarantee their respect. The United Nations Organization defends these rights as inherent to all human beings, without distinction of nationality, place of residence, sex, ethnic origin, color, religion, language or any other condition. In addition, it affirms that we all have the same human rights, without any discrimination. These rights, in addition to being universal, are frequently enshrined in law and guaranteed by treaties, customary international law, general principles of

law and other sources of international law. International human rights law establishes the obligations of governments to take measures in certain situations or to refrain from certain actions, in order to promote and protect human rights and fundamental freedoms of individuals or groups (United Nations Human Rights, 2024).

The term human rights acquired international normative recognition at the end of the Second World War, being embodied in the Universal Declaration of Human Rights, proclaimed by the United Nations General Assembly on December 10, 1948 in Paris, France. However, there are other documents and historical events that paved the way for its recognition, such as the Declaration of Rights of 1689, the Independence of the United States in 1776 and the French Revolution of 1789.

The Universal Declaration of Human Rights highlights values such as freedom, justice, equality, respect and peace, recognizing human dignity as the essential foundation of these rights. It allows people to exercise freedom of worship, religious beliefs, expression and conscience, adapting to the historical and cultural context in which they develop. As established in its Article 1: "All human beings are born free and equal in dignity and rights and, endowed as they are with reason and conscience, they must act fraternally towards one another" (United Nations, 2024).

This way, it is reaffirmed that human rights are universal (applicable to all people, regardless of sex, age, nationality, sexual or ideological preferences, or social group), inalienable (they can not be transferred or alienated), indivisible (all have equal importance), imprescriptible (they are not lost over time) and have an absolute and progressive character.

Hugo Ramírez and Pedro de Jesús Pallares explain the inviolability or absolute nature of human rights, based on the concepts of Alan Gewirth, Francisco Laporta and Jon Elster. The absolute nature of human rights makes sense when it is recognized that, in practice, certain requirements, norms and principles may come into conflict. In such cases, it is necessary to find a solution that often involves the prevalence of one norm over another, or the displacement of one norm by another (Ramírez and Pallares, 2015). The main focus must be the benefit of the person and the permanent safeguarding of their human rights. Although the norms may contemplate different aspects, unrestricted respect for these inalienable rights must always be prioritized.

Human rights are fundamental rights inherent to all people, understood as subjective rights that everyone is entitled to as persons, citizens or capable of acting (Ferrajoli, 2009). Therefore, it is essential to normatively guarantee these rights in a document that establishes the parameters through which the State recognizes and protects people, allowing them adequate personal development and free and peaceful interaction within the society to which they belong.

In Mexico, since its formation as a State in 1821, the protection of citizens' rights has been enshrined in its various constitutions. The current Constitution, promulgated on February 5, 1917, originally regulated in its first part the Individual Guarantees to which every person must have access. However, in response to changes in the environment, the evolution of ideas and the implementation of international policies arising from social interaction, new discoveries and economic models necessary for cultural and social progress, a substantial reform was carried out in the area of human rights, published in the Official Journal of the Federation on June 10, 2011.

This reform was notable for the modification of Article 1 of the Constitution, which establishes that all persons shall enjoy the human rights recognized in the Constitution and in the international treaties signed by the Mexican State, as well as the guarantees for their protection. The exercise of these rights may not be restricted or suspended, except in cases expressly established in the Constitution itself.

In addition, the second paragraph of this article specifies that the norms relating to human rights must be interpreted in accordance with the Constitution and international treaties on the subject, favoring at all times the broadest protection for persons.

The third paragraph of the aforementioned article establishes that all authorities, within their respective competences, have the obligation to promote, respect, protect and guarantee human rights, in accordance with the principles of universality, interdependence, indivisibility and progressiveness. Consequently, the State is also committed to preventing, investigating, punishing and redressing human rights violations.

In addition to prohibiting slavery and safeguarding the human right to freedom, the last paragraph of Article 1 prohibits any form of discrimination based on ethnic or national origin, gender, age, disabilities, social status, health status, religion, opinions, sexual preferences, marital status or any other reason that violates human dignity and seeks to nullify or undermine the human rights and freedoms of individuals.

With this reform, the Mexican State reinforces the pro persona principle, which establishes that when interpreting and applying norms related to human rights, individuals and their rights must always be protected. In the event of a conflict between two norms, the one that is most favorable to the person and their human rights must be applied, regardless of the hierarchy of the norm.

It is essential to reaffirm that the aforementioned constitutional reform explicitly guarantees the principles of universality, interdependence, indivisibility and progressiveness, which are essential characteristics of human rights. These principles underline the State's obligation to protect them in order to achieve a peaceful and harmonious society.

In this context, the Supreme Court of Justice of the Nation defines human rights as the indispensable goods that allow people to choose and materialize their life plans. These rights, which allow us to live with dignity and develop fully, are recognized and protected by law, and all people possess them by the simple fact of existing (Supreme Court of Justice of the Nation, 2024).

This implies that the State recognizes and guarantees human rights, regulating their compliance within the legal system and obliging the authorities to ensure their proper exercise. In addition, the obligation is established to create the necessary mechanisms for their protection, adapting to changes in life models derived from intellectual, scientific and technological development.

Therefore, in addition to fundamental rights such as life, liberty, free expression, association and choice of work, it is crucial to consider respect for intimacy, privacy and information. Many advances resulting from scientific and technological innovations, such as artificial intelligence, can affect these areas. Therefore, it is essential that the Mexican State assumes its responsibility and acts accordingly to protect these rights.

The question then arises: what is meant by the right to privacy and why is it considered a human right? To address this issue, it is relevant to mention the perspective of the Inter-American Court of Human Rights on the right to privacy. In the case of the Members of the Corporation Collective of Lawyers "José Alvear Restrepo" vs. Colombia, it was argued that any communications surveillance measure may affect the right to freedom of thought and expression, recognized in Article 13 of the Convention.

The right to privacy is essential for free personal expression, since an undue intrusion into the privacy of individuals can limit, both directly and indirectly, the free exchange and evolution of ideas (Supreme Court of Justice of the Nation, 2024). In this same case, the Inter-American Court stressed that the State must establish clear regulatory frameworks on how to obtain, use, retain, disclose and exchange personal data, so as not to violate the right to privacy and private life, regulated in Article 11 of the American Convention on Human Rights. This article establishes that every person has the right to respect for his or her honor and recognition of his or her dignity (American Convention on Human Rights, 2024).

It is essential to protect the dignity and honor of all persons to guarantee the full exercise of their human rights, avoiding any form of transgression. This document underlines the importance of the use of artificial intelligence being carried out within the framework of absolute respect for human rights.

Although international human rights treaties, such as the San José Pact of Costa Rica, regulate the right to privacy and link it to human dignity, in Mexico there is no constitutional provision that explicitly recognizes this right. However, this does not prevent the Supreme Court of Justice of Mexico from ensuring its unrestricted protection in its resolutions. An example of this is case law thesis number 2028409, which establishes that personal data are confidential and their protection must be guaranteed by the State (Extension of the amparo claim in which the confidential quality attributed to certain data is disputed. It is admissible if the initial claim discusses whether these data must be classified as personal, 2024).

Likewise, case law thesis with digital registry 2013976, published in the Official Gazette of the Judicial Seminar of the Federation, mentions among the substantive rights those related to family relations and civil status, as well as the rights to life, personal liberty, conscience, honor and privacy (Substantive rights. Their difference with adjective rights, 2024).

To highlight the importance of the right to privacy, two jurisprudential theses can be considered as a reference. The first, with number 87 of the Supreme Court of Justice of the Nation, addresses the assessment of an expert test in genetic matters. This thesis establishes that authorizing said test does not violate the right to genetic privacy of the alleged father, since in DNA paternity tests only the genetic fingerprint is obtained. Therefore, the alleged father is obliged to submit to the test, in order to protect the best interest of the minor and his right to know his biological origin and the identity of his parents (Measures of coercion. Its application is Constitutional in paternity trials when the alleged ascendants refuse to undergo the expert test in DNA genetics, 2024). The second jurisprudential thesis, issued by the First Chamber of the Supreme Court of Justice of the Nation with the number 58/2020, corresponding to the Tenth Period, considers privacy as a fundamental human right of private life. In a case related to a home visit to carry out a socioeconomic study, the importance of protecting the privacy of the person is underlined, preventing others from accessing their personal space, reserved to exercise their most intimate freedom and interact within their family nucleus.

Privacy is understood as the way in which a person manifests their personality in a strictly personal sphere, even in a space of spirituality reserved for themselves. This thesis emphasizes that the inviolability of the home is an essential component of personal privacy (Socioeconomic study. The indirect amparo trial against the resolution that orders it is appropriate, as it is an act of impossible repair, 2024). Currently, privacy is recognized as a fundamental human right that allows people to maintain a personal space where they can freely develop their personality, valuing their human dignity. This right is also related to the ability of each individual to decide with whom, how and to what extent they share their personal information with others.

The General Law on Transparency and Access to Public Information (Chamber of Deputies, 2024) in its sixth title, classifies information into reserved and confidential, the latter being related to personal data that allows a person to be identified. The personal data mentioned in this regulation includes banking, fiduciary, industrial, commercial, fiscal, stock market and postal secrets, as long as they do not involve public resources. These data are protected and are not disclosed in a mandatory manner.

In the context of the use of artificial intelligence, it is crucial to consider the right to information and its implications. Therefore, it is necessary to establish guidelines that ensure the proper use of data, both reserved and confidential, managed through artificial intelligence.

Despite the advances in Mexican legislation in the recognition of the right to information, as noted above, it is necessary to further develop the protection of the right to privacy, considered a fundamental right that safeguards the private sphere of individuals. This right guarantees that people can develop their personal and family life, respecting their honor, the location of their home, their communication, and even their image and privacy. All of these aspects are human rights that can be violated by the use of artificial intelligence.

Therefore, it is essential to highlight that the Legislative Branch in Mexico faces a significant challenge in protecting the right to privacy. This challenge is exacerbated by recent discoveries and the rapid advance of scientific and technological research, especially in the context of the use of artificial intelligence.

IMPLICATIONS OF ARTIFICIAL INTELLIGENCE REGARDING THE ESSENCE OF THE PERSON AND HIS HUMAN DIGNITY

The exponential evolution of artificial intelligence poses a significant challenge for the Mexican State in terms of the protection and safeguarding of human rights within the country. In this context, it is essential to address the essence of the person and their human dignity to understand how artificial intelligence impacts these rights and the need to adjust regulations to protect them in the midst of techno-scientific evolution.

It is essential to study the concept of person, since it is the subject to whom, by the simple fact of being one, human rights are attributed and an intrinsic dignity is recognized. This dignity allows him to fully exercise his faculties: to reason, decide and act according to his conscience and the values that must guide his conduct.

Etymologically, the word person comes from the Latin term personna, which means mask, an object used by Roman actors to cover their faces during theatrical performances, amplifying their voices, which was essential for their performance. In this context, the legal concept of a person grants legal validity to human actions, but it is meaningless if it is not based on an existing reality, that is, the existence of a human individual, determined by his birth, viability and condition of being free (Villoro Toranzo, 1993). From this it follows that a person assumes various functions within society, together with

the rights and obligations inherent to his condition; however, it is crucial to identify the characteristics that define a person: his nature must be human, he must have life and be free.

From an ethical perspective, a person is a human being endowed with dignity, which allows him to make decisions and act accordingly, guided by values that allow him to distinguish between good and evil, to perform correct or incorrect acts, and to be virtuous or lacking virtues.

Philosophically, a person is a being with dignity and freedom, who acts according to his own circumstances. His life is finite in physical terms, but infinite in the spiritual aspect. It is made up of a body that allows it to develop according to natural phenomena, capable of living its own reality and achieving spiritual peace through the practice and exercise of the values that dignify it as a human being.

The law conceptualizes the person as a being capable of having rights and obligations, endowed with certain qualities and attributes, and characterized by its rationality. This reinforces the idea that the person exists independently of the definition of the term, since the legal notion of a person is not a legal construction, but the expression in legal language of a pre-existing reality (Villoro Toranzo, 1993).

As a human being, the person is defined as an entity that is distinguished from others by possessing special characteristics such as indivisibility, rationality and free will. Although it is just another entity in the world, it is differentiated by these unique dimensions (Recaséns Siches, 2009), which constitute the essence of the human being and its indivisibility. These characteristics allow it to develop its own thinking, make decisions freely and use its intellect to create, modify or transform its environment.

Hence the need to harmonize the ethics of human conduct with the normative structure, in order to promote a harmonious and peaceful life. The person, whether woman or man, is the center of society and the foundation of values, reason, politics, friendship, philosophy, discourse and even the advances of artificial intelligence. It is essential that the State authorities assume their responsibility and adjust legal norms to the current times and life circumstances. This supports the need to address issues such as the person, human dignity, human rights and artificial intelligence, assigning to the State the duty to safeguard human rights and adjust regulatory provisions for the proper use of artificial intelligence, without compromising the principle of human dignity that corresponds to each person, within a framework of values.

Once the concept of person has been defined, it is crucial to highlight one of its distinctive elements: dignity. From a philosophical perspective, dignity is linked to moral conscience, understood as an ethical category that reflects the individual's moral attitude towards himself and society's perception of him (Dictionary of Philosophy, 2024). This term is similar to conscience in terms of the human being's understanding of his duty and responsibility towards society, underlining its role as an essential aspect of the individual's social and moral freedom (Dictionary of Philosophy, 2024).

Human dignity is a moral quality inherent to all human beings; the feeling of dignity is the awareness of this dignity, which promotes its expression and prevents humiliation. Although a person may lack this feeling, he or she always possesses dignity by the simple fact of being human. Dignity is priceless and is an exclusive attribute of the human person, making him or her resilient even in the face of the general interest and the common good.

The concept of dignity has evolved from a notion of social position to express the autonomy and moral capacity of people, constituting the indisputable foundation of human rights. It has special relevance as an element to confront and develop norms related to social transformations caused by scientific and technological progress (Martínez Bullé-Goyri, 2013). This conception underlies the present research work, which seeks to demonstrate the need for the organs of the Mexican State, both legislative and judicial, to prioritize and protect human rights in issues related to artificial intelligence, especially when its implementation may put the essence of human dignity at risk.

The concept of dignity has been the subject of study in philosophy throughout the centuries, from thinkers such as Socrates, Plato and Aristotle, through Epicurus, Epictetus, Seneca, Marcus Aurelius, Marcus Tullius Cicero, Saint Thomas Aquinas, Saint Augustine of Hippo, and Bartholomew de las Casas, to Emmanuel Kant. Kant is considered by many to be the father of the modern concept of dignity, defining it as an intrinsic value of the person from a moral perspective. For Kant, dignity is not just a concept, but a way of identifying the essence of the person, linked to their inherent value simply by being human.

Marcus Tullius Cicero, for his part, proposed that human dignity is based on the four cardinal virtues: wisdom, justice, fortitude and temperance (Pelé, 2006). According to Cicero, these virtues are the basis of human dignity and are supported by honesty. This implies that human beings must be, above all, honest, aware of their environment, capable of making judgments with integrity, and willing to give each person their due, with strength and courage, but always from a position of moderation, reflecting on their thoughts, feelings and actions.

Cicero, like many other philosophers, considered dignity to be an exclusive attribute of human beings, since they are the only ones capable of thinking, reasoning, deciding, analyzing and acting in a sober, majestic, firm and courageous manner. According to Cicero, human beings must know their faculties and limitations, both physical and spiritual, hence his famous maxim: know yourself. This self-knowledge is essential to act in accordance with the four cardinal virtues and thus achieve a dignified life.

Cicero's conception of society cannot be overlooked, since he maintained that human existence must strive to protect it, guided by philosophy. For Cicero, moral good did not lie in an individual search, but in the improvement of common coexistence, which must be the objective of the optimal and virtuous use of reason. Thus, there is an indissoluble link between the dignity of human nature and individual dignity, based on ethical aspects such as freedom, decorum and strength, especially in the political sphere. Furthermore, Cicero claimed that republican institutions were essential to strengthening human dignity, as they allowed human beings to govern themselves and avoid tyranny.

In this context, it is pertinent to reconsider how the authorities of the Mexican State can ensure that the governance of the citizens they represent promotes a better common coexistence, in which the values cited by Cicero prevail. This implies making the most of scientific and technological advances without compromising human dignity.

Kant attributes to dignity a sense of supreme value, which is above all things and constitutes an end in itself. This value is universally recognized and allows the person to freely decide, with complete independence, what to do or not to do. Autonomy, according to Kant, is the foundation of dignity and of rational nature.

Furthermore, Kant maintains that all human beings possess dignity, an unconditional and incomparable value, which is beyond any price. This dignity enables people to create, modify or restructure their environment through their intellectual and cognitive abilities, which has facilitated progress in topics such as artificial intelligence. Thanks to this ability, physicists, mathematicians and neurophysiologists have worked on the concept of neural networks, envisioning how artificial intelligence can emerge from a non-intelligent substrate (Sigman & Bilinkis, 2023, p. 21).

If the person is a being endowed with dignity, which implies his intrinsic worth, the legislation that regulates his conduct and social interaction must reflect that dignity. According to Kant, the legislation that determines all value must possess dignity, that is, an unconditional and incomparable value, for which the word "respect" is the adequate expression of the esteem that a rational being must pay him (Hegel, 2018). Kant sees a link between autonomy and dignity, identifying the former as the foundation of the dignity of human nature and of all rational nature (Hegel, 2018). Therefore, legislation must be in tune with scientific and technological advances to foster a social environment of cordiality, harmony and peace.

Kant's philosophical approach to human dignity links it to the ability to demonstrate the morality of a standard of conduct by using reason and personal autonomy to act rightly. This must manifest itself in the freedom, respect, truth, conscience, sensitivity and happiness of the person, promoting their worth and giving meaning to their existence.

Kant also gives dignity a legal and political meaning, highlighting the special and unique value of individuals as rational beings, capable of establishing and following moral laws. His contribution to the recognition of human rights, and in particular of human dignity, remains an essential reference to better understand the person and guarantee their legal recognition, safeguarding their integrity and granting them value simply for being a rational, autonomous, thinking entity with will.

It is relevant to mention the conceptualization of dignity according to Hegel, since some of his postulates coincide with those of Kant. Hegel maintains that the human being, through the use of reason, is capable of distinguishing between good and bad acts, influenced by culture, which allows him to achieve knowledge of the truths inherent to the human being. For Hegel, the dignity of man does not reside in his immediate will, but in his capacity to know a being-in-itself and for-itself, a substantial being, and to subject his natural will to this knowledge.

Both Hegel and Kant consider the will a crucial element of human dignity, although Hegel refers to the natural will, which is inherent to the person and is born with it. Hegel also addresses the transformation of knowledge and the relationship of the individual with the political system of the State to which he belongs, taking into account culture, social circumstances and the common good. This grants the individual the ability to freely express and practice his ideas, with the aim of reconstructing the limitations of the present and allowing the human being to fully exercise his rights and obligations, under the protection of the State.

Therefore, it is essential that the authorities of the Mexican State assume their responsibility, not only by recognizing human rights in legislation, but also by ensuring that legal norms respond to social changes arising from scientific and technological advances. Furthermore, they must safeguard respect for human dignity so that people can reach a state of peace and harmony, allowing them to fulfill themselves both personally and socially, and achieve the much-desired happiness that arises from the sensitivity that defines them in their environment.

In this context, the following lines focus on identifying the challenges and opportunities that the authorities of the Mexican State face in the face of the rapid evolution of artificial intelligence and how its application must adjust to compliance with the laws and unrestricted respect for human rights.

CHALLENGES AND
OPPORTUNITIES OF THE
MEXICAN STATE IN THE FACE
OF THE LACK OF LEGAL
ORDERS TO GUARANTEE
AND SAFEGUARD HUMAN
RIGHTS IN THE FACE OF
THE ADVANCEMENT OF
ARTIFICIAL INTELLIGENCE

The central theme of this exhibition is the analysis of how the use of artificial intelligence has impacted the proper application of human rights. Mauricio Beuchot, in his work Philosophy and Human Rights, describes these rights as a synthesis of human nature and the formulation of an ethic that must guide individual conduct in their relationships of coexistence (Beuchot, 2014). In this context, and considering the rapid changes in the way of life of today's society, which has achieved important scientific and technological advances, it is crucial to adapt the legal framework. This will allow regulating and ordering the implementation and operation of algorithms, neural networks and virtual platforms, among others, to ensure that technological progress does not compromise human rights.

Talking about artificial intelligence implies recognizing the enormous amount of information that is concentrated in digital platforms, derived from the large volumes of data that are handled, many of which are personal or sensitive. It is essential to prioritize ethical values that guide the design, implementation, and use of these systems, in order to ensure fair, equitable, and transparent outcomes (Corona Nakamura and González Madrigal, 2023).

An article in Forbes magazine identifies significant risks associated with the use of artificial intelligence systems, ranging from job displacement to security and privacy issues. The author underlines the importance of raising awareness about these issues, which, in his opinion, will facilitate dialogue on the legal, ethical, and social implications intelligence (Marr, artificial Therefore, it is crucial to safeguard the right to information and privacy, considered part of human rights, which can be violated by the lack of ethics in the handling of information collected by artificial intelligence systems or by the absence of regulations that ensure their proper use and application.

Artificial intelligence systems often fail to provide clear explanations to their users, which can leave them defenseless when their dignity or human rights are violated. Therefore, it is essential to develop public policies that force these systems to make their usefulness and potential repercussions transparent. This will allow users to freely decide whether they want to use them, under the threat of sanctions to maintain social harmony and concord.

In contemporary Mexico, it is common for Codes of Ethics to be implemented in both the governmental and private spheres that regulate the behavior of members of organizations. This strengthens personal relationships and ensures that actions are ethical and aligned with values that promote better interaction. In this sense, it is crucial that the use of artificial intelligence is based on Ethical Codes that reinforce values such as honesty, respect, commitment, freedom, equality and non-discrimination, prioritizing absolute respect for human dignity and human rights.

Artificial intelligence has expanded to various sectors, from entertainment to the workplace. In the latter, it can negatively affect the working class, since many artificial intelligence systems are designed to replace human labor with machines, robots or computer systems, using neural networks or specific algorithms. Therefore, the State must develop strategies to protect human employment and support affected workers, guaranteeing their right to decent and socially useful work that meets their subsistence needs.

In addition, it is essential to develop public policies that facilitate the adequate training of people to perform in areas related to artificial intelligence systems. Therefore, the State must invest in education and job training to have highly trained and certified personnel in technological development. This will not only benefit the country by making it more competitive internationally, but will also improve its quality and economy.

The proper and responsible use of artificial intelligence systems can optimize the administrative processes of the Mexican State. Progress has already been made with the creation of digital platforms that streamline government procedures, saving time and costs. However, it is still necessary to develop platforms that guarantee the protection of personal data and the right to privacy, since the handling of information by the State does not give it the right to manipulate people's data arbitrarily.

Artificial intelligence systems have also expanded in the education and health sectors, which was evident during the COVID-19 pandemic. During this period, innovative systems were implemented that strengthened the teaching-learning process at all educational levels. In addition, programs were developed that allowed for more accurate and widespread diagnoses, as well as creating

reference tables on the advance, regression or mutation of viruses, contributing to the collection of people's health data.

The viability of artificial intelligence systems was demonstrated by overcoming a health problem with a significant social impact. This underlines the need for the State to assume its responsibility to regulate and foster a harmonious and peaceful environment, adapting its legal system to the needs and changes of the population, including scientific and technological advances that affect social interaction.

It is crucial that Mexican authorities get involved in the use and implementation of artificial intelligence systems to safeguard the human rights and dignity of each person. This is their main challenge, since they are responsible for ensuring adequate social cohesion. To achieve this, they must participate in technological innovation issues, appropriately developing work related to artificial intelligence. This ranges from the places where these systems will be developed to the necessary technological infrastructure, and includes the recognition of the human right to free access to the internet and the way to store data. All of this is essential to guarantee the rights to information, privacy and the secure storage of data in digital format.

It is important to note that, although the use of artificial intelligence systems offers numerous benefits, it also poses significant challenges for State authorities. One of these challenges is the implementation of cybersecurity mechanisms that protect data and information stored in these virtual systems. This is crucial because there are multiple ways to breach such information, which could compromise personal or sensitive data and, consequently, affect the integrity and dignity of people. In addition, the constant traffic of large amounts of security data on the network requires adequate monitoring, where

artificial intelligence can be useful in detecting suspicious behavior (Becerril Gil, 2021).

This justifies the viability of artificial intelligence to identify network attackers or malicious software (malware), which makes it necessary to create secure mechanisms for the proper development of these systems.

Therefore, it is essential to regulate and define how illicit conduct derived from the use of artificial intelligence can be configured. It is also essential to train and professionalize the people in charge of addressing these conducts, ensuring that their work is effective and precise in protecting human rights. In addition, once illicit conduct is demonstrated, sanctions must be applied to offenders to avoid impunity and recidivism. The development of instruments that regulate the use of artificial intelligence must be based on principles that promote life, freedoms and human dignity, focused on the well-being and fraternity of humanity. This statement is supported by Resolution A/HRC/20/L.13, approved by the Human Rights Council of the United Nations Organization (Becerril Gil, 2021).

The challenge posed by artificial intelligence systems is not exclusive to the Mexican State, since their proliferation is a global paradox phenomenon. This offers opportunity to take action and is a topic of public discussion around the world (Fernández Polcuch, 2023). Spain, for example, stands out for its large number of researches in this field. Recently, the Spanish Government approved an Artificial Intelligence Strategy with the aim of improving supercommunication and storage capabilities, optimizing applications derived from artificial intelligence and establishing measures for its practical application within an ethical and values framework (The Government approves the Artificial Intelligence Strategy; 2024, 2024).

A study published by Forbes magazine last year underlines the need to develop new legal and regulatory frameworks to address the specific problems posed by artificial intelligence technologies, such as liability and intellectual property rights. The study highlights the importance of legal systems evolving to keep pace with technological advances and protect the rights of all (Marr, 2023). Therefore, it is feasible to advocate for the creation of global regulations for the use of artificial intelligence systems, in order to safeguard and protect human rights.

Innovation in artificial intelligence requires reflections that allow us to identify the long-term problems that humanity could face, such as the development of artificial general intelligence (AGI) that surpasses human intelligence (Marr, 2023). This could dehumanize people by completely separating the principles and values associated with human dignity. Therefore, it is essential that artificial intelligence experts promote research that addresses issues of cybersecurity, ethics and human rights, as well as the implementation of measures for the responsible and appropriate use of these systems. These investigations must collaborate with state authorities to generate global policies that allow for an efficient, safe and ethical development of these highly relevant processes.

FINAL CONSIDERATIONS

The study of human dignity and rights, based on various philosophical currents, has reaffirmed the understanding that the individual, or person, is and has always been the center of the universe. Its evolution throughout history, its identification with the divine and nature, as well as the theories about its origin and the transformations it has experienced in the world, are the product of the work, labor and action of a unique being. Endowed with a body, feelings and

intelligence, the human being is incomparable, with the ability to communicate, defend their ideas, ideals and values, and even transform their environment.

In this context, the person has created normative orders that enshrine, among others, the right of each individual to be respected for their human essence, as well as their freedom and decision-making capacity. This reaffirms the normative recognition of human rights and dignity. It is necessary to work to ensure the proper exercise of these faculties, allowing people to live dignified lives, in harmony with the scientific and technological advances achieved over time.

Thanks to their cognitive faculties, human beings have developed their intellect generated numerous inventions, such as artificial intelligence. Through the use of algorithms, neural networks and various computer systems, significant advances have been made that facilitated communications, accelerated the dissemination of information and allowed the concentration of various types of data that involve both people and their environment. This has improved the interaction between people and has provided objects with the ability to help solve problems, thanks to computer systems that manage a large amount of diverse information.

The Mexican State, through its authorities, must not only adjust the regulatory framework to guarantee the proper implementation of artificial intelligence systems, but also establish ethical frameworks that prevent the manipulation of people's behavior within society. It is crucial to avoid inequality, discrimination, segregation and the undermining of human rights. To achieve this, it is important to consider the actions implemented in other countries that promote unrestricted respect for human dignity. In this regard, the global regulatory instrument approved by UNESCO

in 2021 is relevant, which establishes that the application of artificial intelligence systems must be based on ethical principles and values. This implies coordinating the work of state authorities with academics, civil society

and businessmen involved in the subject, promoting respect for human rights, the protection of personal data, privacy and the right to autonomy, after knowing the scope of artificial intelligence.

REFERENCES

Ampliación de la demanda de amparo en la que se contravierte la calidad de confidencial que se atribuye a determinados datos. Es procedente si en la demanda inicial se discute si estos datos deben calificarse como personales, 2028409 (Plenos Regionales. Jurisprudencia 05 de 07 de 2024).

Becerril Gil, A. A. (2021, marzo 14). Retos para la regulación jurídica de la Inteligencia Artificial en el ámbito de la Ciberseguridad. *Revista IUS*, 15(48). https://doi.org/10.35487/rius.v15i48.2021.705

Beuchot, M. (2014). Filosofía y Derechos Humanos. México: Siglo Veintiuno Editores.

Cámara de Diputados. (2024, julio 3). Ley General de Transparencia y Acceso a la Información Pública. https://www.diputados.gob.mx/LeyesBiblio/pdf/LGTAIP.pdf

Carbonell, M. (2019). Los Derechos Fundamentales en México. Ciudad de México: Porrúa.

Convención Americana sobre Derechos Humanos (Pacto de San José de Costa Rica). (2024, julio 5). Corte Interamericana de Derechos Humanos. https://corteidh.scjn.gob.mx/buscador/busqueda

Corona Nakamura, L. A., y González Madrigal, J. A. (2023). La Perspectiva Ética y Jurídica de la Inteligencia Artificial en México. *Misión Jurídica*, 199-214.

Derechos sustantivos. Su diferencia con los derechos adjetivos, 2013976 (Tribunales Colegiados de Circuito 05 de 07 de 2024).

Diccionario de Filosofía. (2024, julio 10). http://www.filosofia.org/enc/ros/dig/.htm

El Gobierno aprueba la Estrategia de Inteligencia Artificial 2024. (2024, mayo 14). Gobierno de España. https://avancedigital.mineco.gob.es/es-es/notasprensa/RecursosNoticias/20240514_NdP_EstrategiaIA_2024.pdf

Estudio socioeconómico. Procede el juicio de amparo indirecto contra la resolución que lo ordena, por ser un acto de imposible reparación, 2022513 (Suprema Corte de Justicia de la Nación 05 de 07 de 2024).

Fernández Polcuch, E. (2023, septiembre 21). Hacia una Inteligencia Artificial desde un enfoque de Derechos Humanos: artículo de opinión. *UNESCO*. https://www.unesco.org/es/articles/hacia-una-inteligencia-artificial-desde-un-enfoque-de-derechos-humanos-articulo-de-opinion

Ferrajoli, L. (2009). Los Fundamentos de los Derechos Fundamentales. Madrid: Trotta.

González Serra, D. J. (2024, junio 19). Revista Cubana de Psicología. Pepsic. http://pepsic.bvsalud.org/pdf/rcp/v20s1/04.pdf

Hegel, G. (2018). Lecciones sobre la Historia de la Filosofía III. México: Fondo de Cultura Económica.

Marr, B. (2023, julio 28). Estos son los 15 mayores riesgos de la IA. *Forbes*. https://forbes.es/tecnologia/316482/estos-son-los-15-mayores-riesgos-de-la-ia/

Martínez Bullé-Goyri, V. M. (2013). Reflexiones sobre la Dignidad Humana en la Actualidad. Boletín Mexicano de Derecho Comparado.

Medidas de apremio. Su aplicación es Constitucional en los juicios de paternidad cuando los presuntos ascendientes se niegan a practicarse la prueba pericial en materia de genética ADN, 1001596 (Suprema Corte de Justicia de la Nación 06 de 07 de 2024).

Naciones Unidas. (2024, julio 3). *La Declaración Universal de los Derechos Humanos*. https://www.un.org/es/about-us/universal-declaration-of-human-rights

Pelé, A. (2006, julio 10). Filosofía e Historia en el Fundamento de la Dignidad Humana [Tesis doctoral]. España: Universidad Carlos III.

Ramírez García, H. S., y Pallares Yabur, P. D. (2015). Derechos Humanos. México: Oxford.

Real Academia Española. (2024, junio 19). https://dle.rae.es/inteligencia?m=form

Recaséns Siches, L. (2009). Filosofía del Derecho. México: Porrúa.

Sabater, A., y De Manuel, A. (2024, mayo 18). Una mirada y discusión a través de la literatura especializada y de opiniones expertas. Revista Inteligencia Artificial, Ética y Sociedad. https://www.udg.edu/ca/Portals/57/OContent_Docs/Informe_OEIAC_2021_cast.pdf

Sigman, M., & Bilinkis, S. (2023). Artificial, la nueva inteligencia y el contorno de lo humano. España: Penguin Random House Grupo Editorial.

Suprema Corte de Justicia de la Nación. (2024, julio 3). Los Derechos Humanos y la SCJN. https://www.scjn.gob.mx/derechos-humanos/los-derechos-humanos-y-la-SCJN

United Nations Human Rights. (2024, julio 7). Office of the High Commissioner. https://www.ohchr.org/en/what-are-human-rights

Villoro Toranzo, M. (1993). Introducción al Estudio del Derecho. México: Porrúa.