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Intellectual property and artificial intelligence: Reality & the Future

الملكية الفكرية والذكاء الإصطناعى : الواقع والمستقبل

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Abstract:

Artificial intelligence is amazed every day by solutions to a range of issues that have become global in the age of digitization and rapid communication, and technology has greatly facilitated the revolution in human rights and opened up a new space for the exercise of digital rights and freedoms. In parallel, it poses a range of challenges, given the dangers of the widespread use of this space and its investment by some in negative things that have given rise to a range of international issues for which the international community must find solutions. This development certainly makes a great difference to human rights, which makes us ask the following question: What are the reality of intellectual property and artificial intelligence now and how will it be in the future?

Keywords: *Intellectual Property – AI – right – Human-Robot – Data*

الملخص :

يذهلنا الذكاء الإصطناعى كل يوم بطرحه الحلول لمجموعة من القضايا التي أصبحت عالمية في عصر التحول الى الرقمية وسرعة الإتصالات، ورغم أن التكنولوجيا سهلت إلى حد كبير ثورة حقوق الإنسان وفتحت فضاء جديدا لممارسة الحقوق والحريات الرقمية. فإنها بالموازاة مع ذلك تطرح مجموعة من التحديات بالنظر إلى مخاطر الاستعمال الواسع لهذا الفضاء واستثماره من طرف البعض في أشياء سلبية أدت لظهور مجموعة من القضايا الدولية التي يجب أن يجد لها المجتمع الدولي حلولا، والأكيد أن هذا التطور يلحق تغييرا كبيرا بحقوق الإنسان وهو الأمر الذى يجعلنا نطرح السؤال التالى: ما هو واقع الملكية الفكرية والذكاء الإصطناعى الآن وكيف سيكون في المستقبل؟

الكلمات المفتاحية : **الملكية الفكرية – الذكاء الإصطناعى – حق – الإنسان – الروبوت – البيانات.**

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Introduction:

Every day artificial intelligence[1] presents solutions to a range of issues that have become global in the age of digitization. The concept of artificial intelligence[2] has provoked wide controversy, and experts have varied in its definition from what is considered a branch of computer science, and there is a person who knows artificial intelligence about the technological development that makes the machine capable of such as human intelligence, i.e. the ability to learn, think, adapt, self-correct, etc. He considers it to be an expansion of human intelligence through the use of computers by developing programming techniques to be more effective, as was done in the past when the physical effort was compensated by mechanical equipment. But the concept's definition evolved at the same pace as technological development, with all modern definitions being "tried to imitate intelligent human behavior[3]".

Search problem:

Just as the primary goal of AI[4] is to facilitate the empowerment of individuals, in return it adversely affects these rights, and this development is surely bringing about a significant change in human rights that raises the following questions[5]:

Intellectual Property:

What is the future of human rights, especially intellectual property, in the age of artificial intelligence?

What ownership and regulatory models should apply to data, which are necessary for developing artificial intelligence?

.Is the innovation that comes from artificial intelligence eligible for intellectual property protection, and, if so, who owns those rights?

Digital privacy[6]: Free access to data can provide great personal experiences, but how open is it excessive?

How can we ensure that citizens retain control of their personal information[7]?

For digital security[8], "artificial intelligence is also a set of numbers that cannot be decoded and multiplies together in ways that cannot be explained to humans.

If someone hacked and changed settings, how do users know?

What is the best way to protect interconnected, vital systems like smart transport?

How can an increasing volume of data be safely maintained?

Ultra-smart:

What happens if smart devices exceed the human brain's capabilities?

Does the transition from narrow AI (using AI for individual tasks) to superior intelligence desirable?

Business opportunity: What will artificial intelligence change and how?

How can intelligent machines fit into the world of work and reality?

The importance of research: Indeed, this paper is a call for thinking about future strategies and legislative approaches to ensure human rights and God in the age of artificial intelligence.

Research Curriculum:

We will use the descriptive approach in its own inductive and analytical scientific way to address the important points raised by the subject matter.

Search Plan:

I: Artificial Intelligence, Rights and Digital Freedoms

II: Artificial Intelligence and Intellectual Property Rights

III: The rights and ethics of the robot

IV: The future of Human Rights in the Age of Artificial Intelligence.

I: Artificial Intelligence, Rights and Digital Freedoms[9]

Civil society must improve its knowledge and use of artificial intelligence to limit, protect[10], and promote the exploitation, rights, and digital freedoms[11]. But artificial intelligence is now being used more to undermine digital rights[12] and freedoms, by restricting freedom of expression, assembly, and association. China, for example, restricts freedom of expression by using artificial intelligence to search for social-media writings.

As regards freedom of assembly, when demonstrations occur, face-recognition techniques enable the police to identify demonstrators, leading to their detention and interrogation. Governments use AI data analysis to process large amounts of information about civil society organizations and individuals applying for registration.

•International policies and laws related to artificial intelligence13:

Canada, Mexico, India, Finland, Australia, and many other countries have developed or are currently developing national strategies for artificial intelligence. These strategies consider, among other things, the types of AI projects to be developed and implemented, resources for artificial intelligence, and some strategies - including a proposed US bill - that will link AI to national security and defense without adequate consideration of key human rights issues. Such as the protection and promotion of civil liberties. Neglect of human rights issues in national AI policies can lead to policies that focus on the rapid development of AI technology in a single sector (such as the military sector), with insufficient resources and incentives to enhance artificial intelligence for other actors in civil space. Countries must consult with civil society to ensure that national AI policies lead to an enabling environment for prosperous civic life.

New York, Santa Clara, and Seattle have also adopted circulars that include civil supervision in the deployment and dissemination of artificial intelligence systems. These generalizations allow the public – through elected officials or government committees – to know where to use AI and what it has implications, and in some cases to make recommendations about its use. Without civil

oversight, the transparency of access laws is at risk; artificial intelligence algorithms are in the hands of a particular class and are therefore not subject to public control. Laws and regulations must also address relevant areas, such as data protection, public procurement laws and regulations, anti-discrimination, and public hearing systems, which must re-examine and enforce accountability rules for artificial intelligence.

•improving knowledge of artificial intelligence:

Many civil-society officials do not know artificial intelligence enough to talk to policymakers about it. This is even though there are many international civil-society conferences on artificial intelligence and digital rights[14], and workshops, which are easily accessible to grassroots leaders to help them understand what artificial intelligence is, how it works, and how it affects their work. For example, the courses offered by the International Center for Non-Profit Law in other areas allowed civil-society activists to communicate constructively on those other issues, including the Technical Crime[15] and Anti-Terrorism legislation. Once civil-society leaders understand the world of artificial intelligence, they will be able to engage in AI policies that promote the status of civil space, and they will understand how they benefit from artificial intelligence in their activities.

And the creation of independent agencies to help policymakers would help policymakers make informed decisions about artificial intelligence policies, their monetary cost, and their social implications. Like the Parliamentary Office of Science and Technology or the independent budget offices in the United States, Sweden, and Australia, these new units will help to work independently analyzes of artificial intelligence technologies and policies and will provide recommendations based on real costs and benefits related to governments, community, local communities, and human rights.

•the use of artificial intelligence in the service of humanity:

Civil society organizations and technology workers should have more discussions about how civil society organizations can use artificial intelligence to serve humanity. Artificial intelligence can be used at the working level to coordinate internal business, and can also be used to improve and accelerate services to the public. For example, a Russian civil society organization that developed a Pot program provides immediate legal assistance to the protesters. Donors can also use advisory software (Robo-Advisors) to identify projects to which grants will be made, and it will not go long before humans start using software such as Siri, Alexa, and other AI-based software, of the type of "personal assistant," in making donations to the charities that are favored by these individuals.

But, to achieve this hoped-for progress, civil-society organizations need to have the capacity to use artificial intelligence, which is costly. Several companies are already helping civil society use artificial intelligence, such as Microsoft, Google, IBM, and others, but the fact is that civil-society organizations do not

have enough resources to invest in new technologies. We need additional ways to make available low-cost, free-to-use AI expertise for civil society organizations, perhaps by transferring cost-effective knowledge from governments, or by an initiative whereby technology staff work in civil society organizations for several weeks. Such exchanges allow organizations to develop knowledge of artificial intelligence, highlighting the gaps that remain unknown, which will emerge when new technologies are adopted.

• a positive role for artificial intelligence in protecting civilian space:

While artificial intelligence can play a positive role in protecting civil space, the current role of civil society in developing and using artificial intelligence is limited. To address these problems, the International Center for Non-Profit Law (ICNL) is preparing an initiative to ensure that the promotion, rights, and digital[16] freedoms[17] are a key consideration in the development of artificial intelligence technologies and policies. The initiative includes: (1) the development of international standards; (2) the improvement of domestic policies and laws; (3) the improvement of knowledge of artificial intelligence; and (4) the use of artificial intelligence in the service of humanity.

II: Artificial Intelligence and Intellectual Property Rights[18]

Artificial intelligence has emerged as a general-purpose technology with widespread applications in all areas of the economy and society. Its impact is already being largely reflected in the development, production, and distribution of economic and cultural goods and services, and is likely to increase in the future. In this way, artificial intelligence intersects with IP policies in many different axes, as one of the main objectives of intellectual property policies is to stimulate innovation in economic and cultural systems.

How does AI affect IP?19

Artificial intelligence is increasingly contributing to significant advances in technology and business. It is being used in a range of industries, from telecommunications to self-driving vehicles.

The increase in large data stores and achievements makes it possible to provide high and affordable computing power to boost the growth of artificial intelligence. Artificial intelligence has a major impact on the development, production, and distribution of economic and cultural goods and services. Since one of the main objectives of the intellectual property system is to stimulate innovation in the economic and cultural systems, artificial intelligence intersects with intellectual property in many ways.

In January 2019, WIPO issued a study examining the phenomenon of AI-based innovation. The study, published in the form of a report entitled "Technology trends for WIPO", provides a common information base on artificial intelligence for government and business policy-making and decision-making officials, and the benefit of relevant citizens around the world.

In September, WIPO held a conversation on intellectual property and artificial intelligence that brought together member states and other stakeholders to discuss the implications of AI for IP policies, intending to develop a collective formulation of the questions that policymakers should ask.

After the meeting, Mr. Gray announced that WIPO would begin an open process to draw up a list of issues related to the impact of AI on IP policies so that they could serve as a basis for future discussions. As policymakers began to decode the broad effects of artificial intelligence, WIPO, in turn, is interacting on IP aspects of artificial intelligence. This **interaction is on several topics, notably:**

1- artificial intelligence in the intellectual property administration[20]: Applications of artificial intelligence are increasingly being used to manage requests for intellectual property protection. Examples of AI applications in this area include WIPO Translate and WIPO Brand Image Search, using AI-based applications for translation and automated image recognition. In May 2018, WIPO convened a meeting to discuss these applications of artificial intelligence and to stimulate the exchange and sharing of information.

2- a platform for information exchange on intellectual property and artificial intelligence strategies: Artificial intelligence has become the strategic strength of many governments around the world. Strategies for building efficiencies in artificial intelligence and regulatory actions for artificial intelligence are increasingly being adopted. Member States have encouraged WIPO to compile the major government instruments related to artificial intelligence and intellectual property with the assistance of Member States.

3- Intellectual property policies: The third topic is an open and inclusive process to compile a list of key issues and issues that have arisen in intellectual property policies as a result of the emergence of artificial intelligence as a widely used public-purpose technology. To this end, WIPO organized a conversation in September 2019 with the participation of the Member States and representatives of the commercial, research, and non-governmental sectors. At the end of the conversation, the attendees agreed on the general features of a plan to continue the discussions by moving to a more structured dialog. The first step of the plan is for the WIPO Secretariat to draft a list of issues that may form the basis for a common understanding of the key issues that need to be discussed or addressed concerning intellectual property and artificial intelligence policies. This paper reviews issues that have arisen in IP policies as a result of the emergence of artificial intelligence. The issues are divided into the following areas:

1. Patents
2.Copyright
3. Data
4. Designs
5. The technological gap and the composition of competencies

6. Accountability for intellectual property management decisions

Concerning intellectual property and artificial intelligence policies, the issues of artificial intelligence are divided into Patents, copyright and related rights, data, designs, technology gap, and competence formation, accountability for IP management decisions[21].

A) Artificial intelligence and patents[22]

1- the paternity and ownership of the invention :

In most cases, AI is a tool that helps inventors in the invention processor that is a feature of an invention. In this sense, artificial intelligence is not radically different from other computer-aided inventions. Yet it now seems clear that inventions can be deduced independently from AI, and there are many cases reported for patent-protection applications in which the application applicant is named as an inventor.

In the case of inventions that are derived by AI independently[23]: Should the law permit or require that the application of artificial intelligence be designated as an inventor? Or should the inventor be required to be limited to man? If only a person is required to be called an inventor, should the law provide for indications of how the human inventor is determined? Or should this decision be left to special arrangements, such as institutional policies, with the possibility of judicial review by an appeal following existing laws regarding the dispute over the patentability?

The issue of the paternity of invention also raises the question of who should register a patent owner with an application of artificial intelligence. Should specific legal provisions governing ownership of inventions developed independently by artificial intelligence be introduced? Or should the invention be owned by his father in addition to any special arrangements – such as institutional policies – regarding the inventions and ownership of the invention?

Should the law exclude from patent protection any invention derived independently by application of artificial intelligence? ·

2) Patent-protected topics and patent eligibility guidelines:

The issue of computer-aided inventions and how patent laws are addressed have been the subject of lengthy discussions in many countries around the world. In the case of inventions based on AI or AI: Should the law exclude patent-based inventions independently from the application of AI? Should specific provisions be introduced for inventions developed with the help of artificial intelligence or should such inventions be treated in the same way as other inventions developed with computer help? Should the Patent Inspection Guidelines be amended for inventions developed with AI?[24] ·

3) innovative or non-obese activity:

A patent eligibility requirement is that an invention includes or is not self-evident. The standard applied in assessing non-prima is whether an invention will be self-evident to a person in the profession to which the invention belongs.

In the context of inventions based on artificial intelligence, what profession does the standard refer to? Should the profession be the technological domain of a product or service that is derived from an invention derived from an application of artificial intelligence? Should the criterion of "not being a profession" be maintained where the invention is independently derived from artificial intelligence? Or should consideration be given to replacing a person with a trained algorithm using data belonging to the professional field in question what are the implications of replacing a professional with a person with AI in determining the previous industrial technology base? Should AI-based content be considered as a pre-industrial technology?

4) Detection ;

One of the primary objectives of the patent system is to detect technology so that, over time, the public can be enriched and a regular and easily accessible record of the human-technology proceeds is provided. Patent laws require that disclosure of invention be sufficient for any person in the profession to reproduce the invention. What problems do AI-derived inventions or help them with disclosure requirements? In the case of automated learning, where the algorithm changes over time as the data feeds, is it enough to detect the initial algorithm? Would it be useful to follow a system of deposit algorithms such as microbiting? How should the data used in the algorithm's training be treated for the fulfillment of the disclosure requirement? Should the data used in the algorithm's training be disclosed or described in the patent application? Should the human experience used in data selection and algorithm training be required?

5) Policy considerations for the patent system:

One of the fundamental objectives of the patent system is to encourage investment in human and financial resources and risk in inventions that may contribute positively to the well-being of society. In this way, the patent system is a central pillar of innovation policies in general. So does the emergence of inventions independently derived from AI applications require a reassessment of the importance of the patent incentive concerning inventions derived from AI? Specifically, should a unique system on IP rights for inventions based on artificial intelligence be considered to adjust the incentives for innovation to fit the field of artificial intelligence? Is it premature to consider these issues now because the impact of AI on both science and technology is still being detected at a rapid rate, and at this stage, there is not enough understanding of this impact and it is not known whether policy measures are appropriate to the circumstances?

B) Artificial intelligence, copyright, and related rights[25]

1- The paternity and ownership of the workbook[26]**:**

AI applications can produce literary and artistic works independently. This capacity raises important policy questions in the face of the copyright system, which has always been closely linked to the human spirit and respect for the expression, reward, and encouragement of human creativity. Policy positions on the attribution of copyright to artificial intelligence-based works would strike at

the very essence of the social purpose for which the copyright system was created. If artificial intelligence-derived works are excluded from copyright protection, the copyright system will be seen as a tool that protects the dignity of human creativity and preferences for machine creativity. If copyright protection is granted to workbooks[27] derived from artificial intelligence, the copyright system will be seen as a tool that is biased toward providing as many creative works as possible to consumers and equates human creativity and machine creativity. Specifically, should copyright be attributed to literary and artistic works that are independently derived through artificial intelligence or should there be a human innovator? If copyright can be attributed to artificial intelligence-derived works, to those who attribute copyright rights? Should the application of artificial intelligence be legalized when original works are developed independently so that copyright rights are the legal personality and that legal personality can be organized and sold as if it were a company? Should a unique protection system be considered (for example, a system that provides reduced protection time and other exceptions, or a system that treats artificial intelligence-derived workbooks as forms of performance) for original literary and artistic works that are independently created by artificial intelligence?

2) trespass and exclusions[28];

AI applications can produce creative workbooks by learning from data using AI technologies such as automated learning. Data used in AI training may represent creative copyright-subject workbooks. Hence, several issues arise, namely, should the feeding of data derived from copyrighted works without the author's permission for automatic learning be considered an infringement of copyright? If not, should an explicit exception be made in copyright law or other relevant laws regarding the use of such data in the training of artificial intelligence applications?

If the provision of data from copyrighted workbooks[29] without author permission for machine learning is considered an infringement of copyright, how will it affect the development of artificial intelligence and the free flow of data to promote AI innovation?

If the supply of data derived from copyrighted works without the author's permission for automated learning is considered an infringement of copyright, should there be an exception to certain acts for limited purposes, for example in the case of non-commercial use where the works are produced by users or for research purposes?

If the provision of data derived from copyrighted works without the author's permission for automatic learning is considered an infringement of copyright, then the existing exceptions to the extraction of texts will interact Data for research purposes with this infringement? Would it be necessary to intervene at the policy level to facilitate the issuance of licenses if the unauthorized use of feeding data derived from copyrighted works for automated learning purposes was considered an infringement of copyright? How can unauthorized use of feed

data derived from copyrighted works for automated learning be disclosed and subject to applicable rules, especially when a large number of copyright workbooks are developed through artificial intelligence[30]?

3) deep falsifiers[31]:

Deep-counterfeit technology, or simulated and similar images and videos of people and their traits, such as their voice and appearance, is present and spreading. There is considerable controversy over deep falsification, especially when it is produced without the permission of the person represented in the deep-rooted falsification and when representation creates unjustly acts or opinions attributed to the original. Some call for banning or restricting the use of deep-rooted counterfeiting technology. Others point to the possibility of creating audiovisual works that would allow celebrities and artists to be summoned after they died in an ongoing manner; indeed, it could be authorized by anyone to falsify it deeply. Should the copyright system address the issue of deep falsification, namely, since deep falsification is produced based on data that may be protected by copyright, to whom copyright should be placed in deep-rooted falsehood? Should there be a system that ensures that people who use their counterfeit image and false performances are given fair compensation in deep bleeding?

4) Policy issues:

Are there predictable or unexpected consequences for copyright because of bias in AI applications? Or is there a hierarchy of social policies that must be formulated to prefer the preservation of copyright and human creativity dignity to encourage innovation in artificial intelligence, or vice versa?

Requirement 3: Artificial Intelligence and Data[32]

Data is increasingly produced in ample quantities for extensive purposes and by a large number of devices and activities commonly used or carried out in all aspects of modern society and economy, for example, computing systems and digital communications devices, production and manufacturing plants, transport systems and vehicles; Control and security systems, sales and distribution systems, experiences, research activities, etc.

Data is a critical component of artificial intelligence because modern AI applications rely on automated learning techniques that use data for training and validation. Data is a key element in value formation by artificial intelligence, and thus is of economic value. Comments on appropriate access to copyright-protected data used in the training of artificial intelligence models should be included.

Since data is produced by a wide variety of devices and activities, it is difficult to visualize a single, comprehensive policy framework on data. Many frameworks may be applied to data, but that depends on the interest or value to be regulated. This includes, for example, protecting privacy, avoiding the dissemination of defamatory material, avoiding the misuse of market power or

regulating competition, safeguarding the security of certain categories of sensitive data, or suppressing false and misleading data for consumers.

This is limited to addressing data from the policy perspective underlying the existence of the intellectual property, in particular appropriate recognition of creation and invention, promotion of innovation and innovation, and ensuring fair market competition.

A classic intellectual-property system may be seen as already providing certain types of data protection[33]. Data that represent new, non-intuitive, and useful inventions are protected by patents. Data that represent independently innovative industrial designs that are new or original are also protected, such as data that represents original literary or artistic works. Confidential or commercially valuable or technologically valuable data and its owners maintain confidentiality is protected against certain acts of certain persons, for example, from unauthorized disclosure by an employee, research contractor, or theft through online penetration[34].

The choice or arrangement of data may also constitute intellectual creations and thus be subject to intellectual property protection and some legal systems have unique database rights to protect the investment in database aggregation. On the other hand, copyright protection does not extend to the data contained in the compilation itself, even if the data collected constitute copyright-protected intellectual innovations.

The general question is whether IP policies should go beyond the classical system, and create new data rights in response to the new importance that data have attached as a crucial element in artificial intelligence. One reason for further work in this area is to urge the development of new and useful categories of data; appropriate allocation of value to different data actors, particularly data subjects, data producers, and users; and to ensure fair market competition and deter actions that are considered anti-competitive.

5) additional rights in respect of data ;

Should intellectual property policies consider creating new data rights or should existing intellectual property rights, unfair competition laws, similar protection regimes, contractual arrangements, and technological measures are sufficient to protect data?

If it would consider creating new intellectual property rights for data, what types of data would be protected?

If it would consider creating new intellectual property rights for data, what are the policy reasons for considering the creation of any of these rights?

If the creation of new intellectual property rights for data is to be considered, what is the appropriate form of intellectual property rights? Exclusive rights, compensation rights, or both?

Will any new rights be based on the inherent qualities of data (such as their commercial value) or on protection against certain forms of competition or activity in respect of certain categories of data that are deemed inappropriate or

unfair, or both?

How will any of these rights affect the free flow of data that may be necessary to improve applications of artificial intelligence, science, technology, or AI-based business applications?

How will any of these rights affect or interact with other policy frameworks in terms of data, such as privacy or security[35]?

How can new intellectual property rights be enforced effectively?

In many cases, artificial intelligence depends on a database. The collaboration between Uber and the Rise Lab at Berkeley University has yielded an open-source tool that allows analysts to submit search requests and obtain results that adhere to the latest differential privacy systems (a formal guarantee that provides reliable privacy guarantees). This open-source tool paves the way for keeping commercial information[36] confidential within many organizations. It is even more striking that this differential privacy can involve millions of devices that generate data in a more personalized way. Apple, Microsoft, and Google have created business analytics that keeps privacy for services that support mobile phones and smart meters.

Researchers and entrepreneurs are actively building methods and tools to maintain privacy in artificial intelligence. The machine education community has long recognized that simple data-hiding techniques can put users' privacy at risk (an early example is Netflix's identity-detection attacks). Below we will list some new technologies to maintain privacy in machine education: UT: Provided by Google, it allows training of a central machine education model without sharing data, and fits mobile services.

6) Differential Privacy:

The interaction between differential privacy and machine education remains an active area of research, and researchers have begun to examine deep learning models that adhere to differential privacy. Homogeneous Encryption: A new domain designed to develop a class of tools that allow complex forms to be computerized across encrypted data. Preliminary work has begun on computer vision and speech understanding techniques.

Emerging-market upland companies are looking to use block chains, distributed logs, and incentive structures that use encrypted currencies. For example, Computable Labs is building an open-source, decentralized structure that allows companies to securely share data and forms. They are trying to “bring block chain networks into line with machine education computing.” While users and regulators emphasize the importance of data privacy[37] companies, the data community is mobilizing to build privacy-maintenance tools for AI systems shortly.

C) Artificial Intelligence and Design the paternity of design and ownership[38]

As with inventions, AI-assisted designs can be produced and can be developed independently by an AI application[39]. In the latter case, AI-aided

designs, CAD has been used for a long time and seems to pose no particular problem with design policies. AI-designed designs can be considered a color of CAD and can be treated in the same way. But in the case of AI-derived designs, questions and considerations arise, as in AI-derived inventions and AI-derived creative works. Specifically, should the law permit or require design protection to be given to an original, independently-derived design through an application of artificial intelligence? If the character of the designer is required to be limited to the human person, should the law provide for indications of how the human designer is determined? Or should this decision be left to special arrangements, such as institutional policies, with the possibility of judicial review by an appeal following existing laws regarding the dispute over design ownership? Should specific legal provisions governing the ownership of developed designs be developed independently by artificial intelligence? Or should the design ownership be derived from her father's attribution and any special arrangements – such as institutional policies – regarding the paternity of design and design ownership?[40]

D) Artificial intelligence, technological gap, and competency formation[41]

The number of countries with experience and competence in artificial intelligence is limited. Meanwhile, artificial intelligence technology is advancing at a rapid pace, creating the risk that the current technological gap, rather than being reduced, will worsen over time. Besides, while efficiency is limited to a limited number of countries, the effects of AI are not limited to and will continue to be applied only to countries that are competent in the field of artificial intelligence.

This evolving situation raises a great number of questions and challenges, but many of those questions and challenges go far beyond the scope of intellectual property policies, including, for example, labor policy, ethics, human rights, and so on. This list of issues and the mandate of WIPO only concerns intellectual property, innovation, and creative expression. In the area of intellectual property, are there measures or issues to be considered to help reduce the negative effects of the technological gap in artificial intelligence?

Competency[42] ;

What policy measures in the intellectual property policy area are conceivable and could contribute to containing or reducing the technological gap in AI efficiency? Are these measures of a practical nature or a policy nature?

E) Artificial intelligence and accountability for IP management decisions[43]

AI applications are increasingly being used for IP management. The list of issues does not concern issues related to the development and exchange of such applications as may be possible among the Member States, where this is discussed at various meetings of the Organization's work, in various bilateral forums, and elsewhere among the various Member States. However, the use of

artificial intelligence in IP management also raises some policy questions, most notable accountability for decisions made in connection with the follow-up and management of IP requests. Accountability for intellectual property management decisions

Should any policy or practical measures be developed to ensure accountability for decisions taken in connection with the follow-up and management of intellectual property requests when such decisions are made by artificial intelligence applications (e.g., promoting transparency about the use of artificial intelligence and concerning technology used)?

Do you think about any legislative changes to facilitate decision-making through AI applications (for example, review legislative provisions concerning the powers and powers of certain designated officials)?[44]

III - The rights and ethics of the robot

In October 2017, the Sofia robot obtained Saudi nationality[45]. Whether it is indeed a recognition of the robot's right to exist, even it's right to citizenship and the nationality of a State in the world, or merely a publicity event, in any event, the event within the AI community has once again raised the question of robots having rights or duties. The talk about putting artificial intelligence into a moral framework[46].

AI Ethics is a contemporary branch of philosophy, specifically within the discipline of "Technology Ethics", which deals with ethical issues related to robots and different types of artificial intelligence. AI ethics is based on two ethical aspects of this area: The machine's relationship with the human being, and the human relationship with the machine.

The first, the machine's relationship with man, is concerned with asking how machines can be useful/harmful to humans, and whether robots will own, or must possess, a moral logic? In this case, what ethical behavior should robots follow? How can machines be used to harm humans? What are the possible ways to avoid this danger? Conversely, how can they be used to serve people and their benefit?

The other aspect of AI ethics, the human relationship to the machine, is concerned with how and for what purpose machines are used, meaning questions such as: How does a human design the machine? How do they build it? How do they handle it? And most importantly, what does it use? Does the machine have rights and duties?

A) Robot Rights:

The term “Robot Rights” refers to the human moral obligation to the machines they own. If developed enough, the robot may have a right to exist, as human beings are. Some institutions that sponsor AI research also guarantee other machine rights in a highly conscious state, which has not happened yet but is possible, such as freedom of expression and equality before the law.

This, for some researchers, is associated with the first duty of the robot to serve humans. Rights such as the right to exist and the right to function must first be following his duties to us as human beings, and rights such as the right to life and the right to work must be consistent with his duties to the human community as a whole.

For example, the computer scientist and famous "Aliza" maker Joseph Feigenbaum believes that artificial intelligence should never be used as an alternative to human beings in certain jobs, such as customer service, psychological treatment, care for the elderly, security preservation, justice, and police because these professions require a measure of care and respect that artificial intelligence cannot provide. He cannot, therefore, accomplish those functions, because genuine feelings of emotion and altruism play an important role in them.

This view is linked to the Faizenbaum position itself, which is skeptical of artificial intelligence capabilities. But if the project of "strong artificial intelligence" is ultimately possible, and the robot has gained awareness and sense, this argument may become unsound, and in this case, the robot has all the rights that are of human beings. If artificial intelligence has to work according to a particular ethical model, which model will be? , the current debate on robotic rights is linked to the ongoing debate on animal rights, as artificial intelligence has not yet reached the rank of humans in intelligence. For example, when the robotic manufacturer Boston Dynamics released a video showing employees kicking a robot to test its ability to maintain its balance, the animal rights organization PETA issued a disapproval statement describing this behavior as "unacceptable." The question of robot rights is therefore related to more than one factor, including the ability of artificial intelligence to gain awareness and feel, and whether it has rights, although it is not so conscious and sensitive, as we defend, for example, animal rights, and finally whether robot rights are suspended for its benefit to human beings. Or independent of its service for this benefit. The opinions are divided in the answer to each question.

B) Robot duties:

Since the Industrial Revolution began with a labor force that manages the machine, machines have been used to facilitate work, which is different from artificial intelligence. Work in this case is done only by the machine, without human intervention, that is, without the need for a working person. This means that an intelligent machine will be much more autonomous than any other machine, and that raises important questions about its moral responsibilities, and its ability to tell the right thing from the wrong.

Once we start thinking about the ethical value framework that AI should adopt, and build robots accordingly, through which it works, and to gain some moral logic, another crucial problem, one of ethics itself and its philosophy, emerges.

If artificial intelligence has to act according to a particular ethical model, which model will be? Moral models and values differ across cultures, peoples, and religions, and even within one people may vary from time to time, from group to group, much less from individual to individual.

This is what distinguishes moral value from cognitive or scientific value. If the latter were based on immediate reality, it would make them "objective" knowledge. Ethics, on the other hand, maybe relative and not based on objective facts, evidence of which is that people are different and moral philosophers are different in their vision of right and wrong. In this case, which ethical model or theory should artificial intelligence be programmed on?

The philosophy of ethics has introduced some theories from which artificial intelligence can benefit. But they are theories that differ, because we have a candid moral duty to see good ethical behavior as an end in itself, so the end does not justify the means in any way. Contrary to Cantians, for example, the utilitarian doctrine holds that the end justifies the means and that the benefit of an act is a criterion for judging by the morality of the act.

If we are faced with a problem as human beings in the multitude of moral models and theories and we do not agree on clear ethical judgments, how should robots be made in a way that makes them "moral"?

C) Toward the Ethics of Artificial Intelligence:

We stand at the dawn of a new era. The technological revolution is rapidly changing our lives, dramatically changing the ways we work and learn, and even those we live together. AI is experiencing tremendous growth and new applications in a growing number of sectors, including security, the environment, research, education, health, culture, and trade, as well as the increasingly complex use of big data. Artificial intelligence is the new frontier of humanity. Once these boundaries are crossed, artificial intelligence will lead to a new form of human civilization. The guideline for artificial intelligence is not to become independent or to replace human intelligence. But we must ensure that it is developed through a human approach based on values and human rights.

Artificial intelligence can open up tremendous opportunities for achieving the United Nations SDGs set out in the 2030 Sustainable Development Plan. Its applications offer innovative solutions, improved risk assessment, better planning, and faster knowledge sharing.

D) Addressing the challenges of artificial intelligence[47]:

While artificial intelligence is a staggering asset of responsible development in our societies, it raises major ethical issues. How can we ensure that algorithms do not violate basic human rights from privacy and data confidentiality to freedom[48] of choice and freedom of conscience? Can we ensure freedom of action when our wishes are predictable and directed? How can we ensure that social and cultural stereotypes are not replicated in AI programs, especially when it comes to gender discrimination? Can these circuits be repeated? Can the values be programmed, by whom? How can we ensure

accountability when decisions and actions are fully automated? How do we ensure that no one, wherever in the world, is denied the benefits of these technologies? How can we ensure that AI is developed transparently so that the global citizens whose lives are affected have a say in their development?

To answer these questions, we must distinguish between the direct effects of AI on our societies, the consequences we already feel, and the long-term implications. This requires that we collectively form a broad strategic vision and action plan.

E) The global dialog on AI ethics:

The world must ensure that new technologies, especially those based on artificial intelligence, are used for our societies and sustainable development. We must find the best solutions together to ensure that the development of artificial intelligence is a chance for humanity, as our generation has a responsibility to move toward a more just, peaceful, and prosperous society, and must regulate the development and applications of artificial intelligence to conform to the fundamental rights that shape our democratic vistas.

IV- The future of Human Rights in the age of artificial Intelligence[49]

Investment in artificial intelligence has been aimed at ensuring a future in which alternative solutions to global issues are offered, ranging from food security to economic development and health service development[50]. But as important as the positive effects of artificial intelligence on individuals' fundamental, social, economic, and cultural rights, it strengthens the role of multinational corporations in exchange for a diminishing role for governments. Companies have a pure profit purpose while ensuring rights are the responsibility of States. A fundamental challenge is the need to balance the protection of human rights with economic development. But it will be more difficult and complex in the era of artificial intelligence because individuals will face choices made by companies rather than by states that are committed to individuals under the social contract.

In an age of artificial intelligence, the word will be to determine the path of humanity and to turn human rights[51] to technological sovereignty. This justifies the race for artificial intelligence in the current Cold War between economic and technological forces, namely China and the United States, which compete for technological sovereignty, as the only gateway to maintaining global primacy in both military and economic terms.

In this race, the future of humanity remains a must for change, especially with robots that can develop themselves[52], much more than the experience of the humans or engineers who first made this kind of robotic. This in itself poses a threat to one of the most important rights, namely the right to life, especially if these robots are used by terrorist groups.

All AI agencies are employed to intervene in countries' internal affairs now, where wars are no longer conventional wars, but cyber[53] or cyber wars. There is also the impact of AI on freedom as a fundamental right. While the Internet and smartphones have greatly facilitated the exercise of freedom of expression by individuals, they, by contrast, limit it, because the same methods and techniques that encourage freedom of expression often facilitate security-driven monitoring of freedom[54]. Who can now talk about the confidentiality of correspondence where any object can see emails and text messages? Who can ensure that personal data is protected when individuals give up it voluntarily to companies that do not know how and why do they invest? So the freedom-to-freedom margin gives him a price, the right to privacy[55].

What about the right to education? Yes, the Internet and artificial intelligence make this right easy to access? This is precisely what the United States of America wanted in the 1990s to achieve when the GATS was included in the WTO Agreements, where it considered e-education a service sold and purchased with the future of distance education via the Internet, which the United States was then able to guarantee as a right of individuals; How is it not the one who rules the Internet and is the one who is the throne of technological sovereignty internationally?

Conclusion:

Results:

Artificial intelligence is the new frontier of humanity and once these boundaries are crossed, artificial intelligence will lead to a new form of human civilization artificial intelligence is a powerful tool that needs to be carefully developed and regulated, reducing exploitation. This will empower civil society while artificial intelligence is a staggering asset for responsible development in our societies, it raises major ethical issues.

Recommendations:

- We are at a detailed stage; Artificial intelligence is evolving rapidly, but its ability to promote digital rights[56] and freedoms is barely emerging, and civil society needs to deal at the global, national, local, and organizational levels to ensure that no one - including marginalized groups and individuals - is left behind in this new era.
- We must find the best solutions together to ensure that the development of artificial intelligence is a chance for humanity, with our generation responsible for moving to a more just, peaceful, and prosperous society.
- the world must ensure that new technologies, especially those based on artificial intelligence, are used for our societies' benefit and sustainable development. advances and applications of artificial intelligence must be regulated to conform to the fundamental rights that shape our democratic teams.

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