ARTIFICIAL INTELLIGENCE - BETWEEN THE RIGHT TO INFORMATION AND THE PROTECTION OF INTELLECTUAL PROPERTY

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Abstract: Science, as a collection of knowledge regarding the world and life, is a fundamental component of society, the two being interdependent and mutually influencing each other throughout evolution. Science has several purposes, psychological, rational, but also the social purpose of contributing to social welfare. The problem that can arise is when science deviates from this social role and is used for purposes contrary to the interests of society, or when the results of scientific research may infringe fundamental human rights and freedoms. The study aims to analyze how the latest scientific revolutions, digitization and artificial intelligence, are likely to affect human rights. Considering the latest novelty element of the increasingly widespread use of artificial intelligence, the views of society and international and regional organizations on this issue will be analyzed, with particular reference to ensuring a balance between the right to information and respect for intellectual property rights.

Keywords: digitization, artificial intelligence, right to information, intellectual property rights, fundamental human rights.

JEL Classification: K10.

1. General considerations

J.D. Bernal[1] , himself a scientist, has devoted an entire study to the social function of science (Bernal, 1946, p.381), believing that a social life based on the benefits of science leads to a new civilization, which is reflected in attitudes towards freedom. In the 19th century, freedom was apparent, he says, but "in an integrated and conscious society" the concept is transformed into "freedom as an understanding of necessity". As early as 1946, Bernal questioned why people were reluctant to embrace the changes brought about by the new scientific conquests, and he considered that the origin of this skepticism "lies in the profound lack of humanity" that people associate with the scientific world (Bernal, 1946, p.381). The effectiveness of scientific research should translate into social welfare, but scientific research is not always used for noble purposes.

Society's needs are constantly changing, and the scientific research results evolve in line with this dynamic. In this context, it is important to consider whether the use of the latest scientific breakthroughs in information technology is likely to affect fundamental human rights.

We will turn our attention to the digitization of society and the use of artificial intelligence. By digitization we mean "transforming analogue signals into digital signals"[2], "putting information into digital form (= as a series of 0 and 1 numbers) so that it can be used by computers and other electronic equipment"[3] or "adapting (a system, process etc.) to be operated using computers and the internet"[4] .

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[1]John Desmond Bernal - 1901-1971, Irish physicist, known for his studies of the atomic structure of solid compounds, during which he made major contributions to X-ray crystallography, https://www.britannica.com/biography/John-Desmond-Bernal

[2]DEX 2009 (Explanatory Dictionary of the Romanian language)

[3]https://dictionary.cambridge.org/dictionary/english/digitize

[4]Oxford Languages and Google, https://languages.oup.com/google-dictionary-en/, which exemplifies, "carriers have been forced to digitize every area of their business as quickly as possible"

It may be difficult for today's people to accept the new digitized processes, the new technologies, but this is considered the third industrial revolution, the digitization revolution - industry 3.0, which has led to improved human communication. We are already in the stage of the fourth industrial revolution, also called industry 4.0, in which Big Data, Artificial Intelligence (AI[5]) and the Internet of Things (IoT) play an increasingly important role. In fact, the two stages of industrial development 3.0 and 4.0 are considered to be intertwined and interconnected. Unlike the first two industrial revolutions (the invention of the first steam engine - industry 1.0 and the discovery of electricity - industry 2.0), the latter two are not based on the discovery of a new source of energy, but on the development of technology - the phenomenon of digitization.

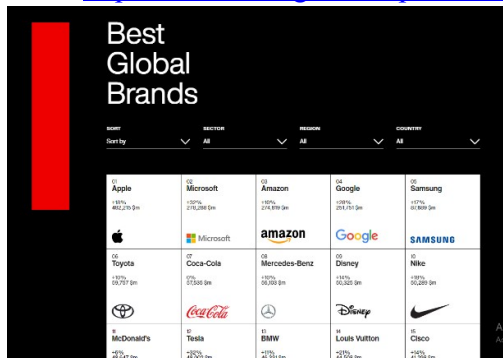These changes have had consequences for the world economy by changing the Top 15 best global brands ranking.
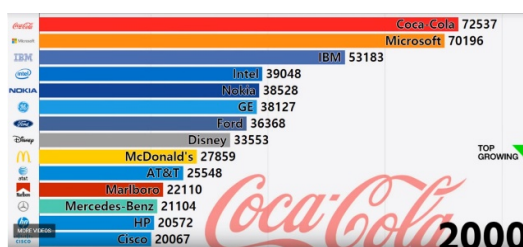
In 2022, the ranking has changed, but we can see that IT-based companies still occupy the top 4 positions:

Source: https://www.orange.ro/help/articole/cele-4-revolutii-industriale-o-scurta-istorie

Source: https://interbrand.com/best-global-brands/

The trend continues in 2023, with the top four positions also occupied by IT companies.

Artificial intelligence involves the use of computer programs that have some of the qualities of the human mind, such as the ability to understand language, recognize images and learn from experience[6] .

The digital revolution is radically transforming society and the way people live. Thus, it is also disrupting the law, not only in terms of mechanisms for regulating and normalizing behavior, but also in terms of the very foundations of legal reason and logic.

2. The international and regional bodies' view on the use of Artificial Intelligence

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[5]Throughout the text we will use the abbreviation AI for artificial intelligence.
[6]https://dictionary.cambridge.org/dictionary/english/artificial-intelligence

a) **United Nations (UN)**

Through its bodies, the World Intellectual Property Organization and the United Nations Educational, Scientific and Cultural Organization, the UN has initiated discussions on the protection of intellectual property in the context of AI, and has been concerned with identifying and managing the risks involved.

AI ethical rules have been introduced, but compliance is voluntary and not legally binding.

- **World Intellectual Property Organization (WIPO)**

The paper "*Generative AI - Navigating intellectual* property" (WIPO, 2024) considers that the adoption of AI by companies and organizations represents a substantial opportunity, but also includes significant legal risks.

In terms of protecting the intellectual property rights on data used by AI, huge amounts of data are estimated to be used for training. There are already public disputes, including legal ones, about protection by intellectual property rights in all its forms: copyright, trademark, but also industrial property rights: on patents, designs, databases or software, etc.

Another identified risk is related to preserving the confidentiality of business information and the protection by intellectual property rights of the AI system itself, which is an innovation in itself. Managing this risk requires a cost-benefit analysis and needs to be addressed through non-disclosure policies.

- **United Nations Educational, Scientific and Cultural Organization (UNESCO)**

UNESCO adopted, at its General Conference of November 2021, the "*Recommendation on the Ethics of AI*" (WIPO, 2024) , the first set of standards on AI ethics based on observing fundamental human rights and freedoms.

The tool is based on the premise that the evolution of AI technology must always be accompanied by ethical values, especially as there is no uniform regulation.

b) **The Council of Europe**

In 2021, a study entitled "*Artificial Intelligence, Human Rights, Democracy and the Rule of Law – a primer*" (Leslie, Burr, Aitken, Cowls, Katell and Briggs, 2021) was conducted. The approach of the study is based on the premise that AI should be treated in terms of both the benefits and harms it can cause to individuals or groups. Thus, AI relies on certain expertise and, in this context, the protection of intellectual property must be considered. The study highlights that there must be a link between the principles of using AI, the rights and obligations applicable to the sectors and cases in which this technology is used.

The principles set out by the study are: respect for human dignity, human freedom and autonomy, harm to people and the environment, non-discrimination, gender equality, equity and diversity, transparency and explainability of the system, protection of personal data and privacy, accountability, democracy and the rule of law.

Thus, it is considered that, linked to the principle of transparency and explainability, one of the key obligations is that: "Member States should make public and accessible all relevant information about AI systems (including their operation, optimization, underlying logic, type of data used) that are used in the provision of public services, *protecting at the same time* legitimate interests such as public security or *intellectual property rights*, while ensuring full respect for human rights"[7] .

The Council of Europe is also considering the adoption of a legally binding treaty for signatory states to regulate the legal status of AI use. There are views that this step would be important given that there are many Council of Europe member states (46 member states and

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[7]Page 21 of the Council of Europe study.

6 observer states) and other non-member states could become signatories to such a treaty. However, as this is an international treaty, its implementation in the law of the signatory states could take a long time and there could be differences in regulation (MIT Technoloy Review, 2023).

c) Organization for Economic Co-operation and Development (OECD)

In 2019, the OECD published the "*Council Recommendation on Artificial Intelligence*" (OECD, 2019) (at the proposal of the Digital Economy Policy Committee), which has been updated, most recently on 08.11.2023, and is considered an OECD legal instrument.

This instrument also aims to encourage innovation and trust in AI by promoting responsible management of trusted AI while ensuring respect for human rights and democratic values.

The paper highlights the need to update the legal framework and harmonize it at Member State level so that the use of AI does not undermine human rights as a whole, with particular attention needing to be paid to the protection of intellectual property rights, personal data, consumers, responsible business conduct and competition.

d) Global partnership on AI

Building on the principles set out by the OECD, the Global Partnership on IA (GPAI) was established in 2020 as an initiative to bridge the gap between AI theory and practice by supporting cutting-edge research and applied work on AI priorities (GPAI, 2024). The GPAI brings together experts from governments, civil society, international organizations, science, academia and industry to strengthen international cooperation, create common policies and apply OECD principles. While the initiative of France and Canada in setting up this partnership is commendable, there are views that no significant progress has been made in the GPAI.

e) The European Union

The European Commission has adopted, in 2020, the *"WHITE PAPER on Artificial Intelligence - A European approach to excellence and trust"* (European Commission, 2020). The document defines AI as "a set of technologies that combine data, algorithms and computing power" and its benefits should profit citizens, businesses and the public interest. It also sets out common directions for action by Member States to enhance the value of AI and establishes seven key requirements for its proper use: human involvement and oversight; technical robustness and security; privacy and data governance; transparency; diversity, non-discrimination and fairness; social and environmental well-being; and accountability. It highlights that AI, in addition to its undoubted benefits, can generate harms that "could be both material (safety and health of individuals, including loss of life, property damage) and moral (deny privacy, limit the right to freedom of expression, deny human dignity, discrimination, e.g. in employment)", and that the use of AI can be linked to a wide range of risks (risks to fundamental human rights, safety risks for users). The paper concludes that there is a need for legal regulation of AI use and launches a broad consultation on expert proposals.

In 2021, the Proposal (European Union, 2021) for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial Intelligence Act - EU AI Act) and amending certain Union legislation was published and is still under negotiation with a view to the adoption of a comprehensive act (European Parliament, 2021). At the end of January 2024, the Council and the Parliament reached agreement on the Artificial Intelligence Act, considered to be the first legal rules, worldwide, on AI (Council of the European Union, 2021), with the adoption procedure to follow.

The draft legislation is based on the premise that an AI system may present a high risk and have a negative impact on fundamental rights, such as: the right to human dignity, respect for private and family life, protection of personal data, freedom of expression and information, intellectual property rights, freedom of assembly and association and non-discrimination, the right to education, consumer protection, workers' rights, rights of persons with disabilities, gender equality, the right to an effective remedy and to a fair trial, the right of defence and the presumption of innocence, the right to good administration[8].

On the other hand, the transparency of AI systems must be ensured without compromising their own intellectual property rights or trade secrets[9]. The draft Act sets out responsibilities along the value chain of the AI system[10], compliance with which must be "without prejudice to the need to observe and protect intellectual property rights and confidential business information or trade secrets in accordance with Union and national law".

3. Practical approach to the risks of using artificial intelligence in relation to the protection of fundamental human rights

The whole world has, for a long time, been under pressure from shocks that take various forms: armed conflicts, terrorist acts, health crises, economic and financial crises, migration, etc. Among these pressures on mankind, a new concern has emerged about how to deal with AI so that it does not negatively affect people's lives. Therefore, the States of the world are concerned about regulating the field of AI, mainly to respect citizens' rights and freedoms. Big Tech[11] companies have been co-opted into these joint efforts, and have even committed to distinctively branding "AI-generated content to make technology safer" (Reuters, 2023).

We can see that the concerns listed above, regulating the framework for AI use are generically addressed to the protection of human rights, democracy and the rule of law and less to the protection of intellectual property rights, although AI uses a multitude of materials (documents, images, etc.) in the learning process.

When we look at the AI generated content, we see that these systems use a large amount of data (text, images, sound, etc.). This data can be:
- Copyright-free data (available free of charge);
- Data under copyright protection;
- Combined data (free and protected).

Intellectual property infringement has already started to raise problems in practice, problems related to both approaches - intellectual property rights on inputs or outputs. In this respect we exemplify:

1. "The New York Times has sued OpenAI and Microsoft for copyright infringement, opening a new front in the increasingly intense legal battle over the unauthorized use of published works to train artificial intelligence technologies. The lawsuit, filed in Manhattan federal court, alleges that millions of articles published by The Times were used to train automated chatbots, which now compete with the news media as a source of reliable information. The cost does not include an exact monetary claim (The New York Times, 2023)".

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[8]Recital 28a
[9]Recital 57d
[10]Art. 28
[11]Alphabet (Google), Amazon, Meta (Facebook), Apple and Microsoft (also known as GAFAM)

The case is an attempt to protect intellectual property - copyright, which has been infringed by using protected works to train AI.

2.   "The Authors Guild, the leading professional writers' organization in the United States, sent an open letter on July 18th, 2023, to the CEOs of prominent artificial intelligence companies, including OpenAI, Alphabet, Meta, Stability AI, IBM, and Microsoft. The letter calls attention to the inherent unfairness of building profitable generative AI technologies using copyrighted works and asks AI developers to obtain consent from authors, cite them, and compensate them fairly.

The open letter points out that generative AI technologies rely heavily on the language, stories, style and ideas of authors. Millions of copyrighted books, articles, essays and poems serve as the foundation for AI systems, but authors have received no compensation for their contributions. These works are included in the structure of language models that power ChatGPT, Bard and other generative AI systems. Where AI companies like to say that their systems simply "read" the texts they are trained on, this is an inaccurate anthropomorphization.

Rather, they copy the texts into the software itself and then reproduce them again and again (The Authors Guild, 2024)".

The attitude of more than 15,000 authors (writers), as well as more than 200 artists (The New York Times, 2023) brings to attention the need for artificial intelligence development companies to take responsibility for observing intellectual property rights as they are protected by current legislation.

3.   On 01.10.2023, actor Tom Hanks warned on his Instagram social media account about the appearance of an ad that allegedly stars him, only it's actually AI-generated: "Beware! There's a video promoting a dental plan with an AI version of me. I have nothing to do with it. Tom Hanks."

This example, too, shows the risks that AI can generate in the film or advertising industry, by creating false images, using the image of celebrities whose consent has not been obtained and which can lead to image and material damage.

4.   "Researchers at Moorfields Eye Hospital and the Institute of Ophthalmology at University College London (UCL) in the UK have developed an artificial intelligence (AI) system that has the potential not only to identify sight-threatening eye diseases, but also to predict general health, including heart attack, stroke and Parkinson's disease. It is considered one of the first basic AI models in healthcare and the first in ophthalmology, called RETFound, and was developed using millions of eye scans used in the UK's Public Health System (NHS). The research team decided that the system should be *open-source*: freely available for use by any institution around the world as part of global efforts to detect and treat blindness by using AI" (Zhou et al., 2023).

The situation is illustrative for both protection options: on the one hand, creators have used information from public databases without affecting intellectual property rights. On the other hand, as far as the use of the system is concerned, it will not be protected by copyright because the creators of the system decided to make it an open source, which can be used by all users interested in the field.

5.   "The Emag and Carrefour businesses are announcing the introduction of AI into online commerce by creating chat rooms where AI will be able to answer more complex customer questions or help them search for products. Of course, such use relies on the use of customers' personal data, which suppliers have access to in another context, that of using online commerce platforms" (HotNews, 2023).

This situation is representative of how the use of AI can infringe individuals' rights to the protection of personal data as guaranteed by European law. The data to be used was obtained from customers for another purpose, therefore its use by the AI system would not comply with the relevant legal provisions.

4. Conclusions

Generative AI systems are believed to be trained on huge amounts of proprietary data (data being considered vital to these systems). The identified issue is whether the use of this data and the results generated by AI may constitute intellectual property infringements.

Intellectual property law in the field of AI needs to be approached from both the input and output sides of the AI system. The approach is different in terms of risks and risk management.

In terms of the inputs, i.e. the data used for creative AI, these are protected by each country's IPR legislation, but in most countries the legislation was enacted before the advent of AI, which has led to uncertainties about the application of these provisions to AI outputs.

In terms of outputs, generative artificial intelligence can produce inappropriate or illegal results, including incorrect information, intellectual property infringements, deepfake, personal information, defamatory accusations, and discriminatory, biased and harmful content.

At the same time, in terms of outputs (generated results), there is still no legal framework to protect this generated data, but the creators of the AI system can protect it by signing a confidentiality agreement or by contractual clauses on non-disclosure.

We believe that it is necessary to harmonies the legislative framework so as to transpose into practice the principles and ethical values set out by international organizations for the effective protection of intellectual property rights and to avoid the creation of unauthorized or false content.

In addition to the new regulations that are expected to be adopted, certain voluntary risk management measures need to be implemented, taking into account, of course, the costs involved:

−adopting technical safeguards for observing human rights;

−checking how the data used to drive the AI system is protected by intellectual property rights;

−keeping the traceability of how the scheme is run, so that it can be demonstrated that copyright has been observed or public resources have been used;

−training people involved in setting up and training the system on observing human rights (right to privacy, intellectual property rights, personal data protection, etc.);

−compensation to authors whose works should be used.

As we can see from our daily lives, information technology, digitization, are transforming our lives and, like any change, can create difficulties of acceptance and adaptation. AI is now, in terms of social approach, a new challenge with both advantages and disadvantages.

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