

ARTIFICIAL INTELLIGENCE AND MORAL RIGHTS

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Abstract

Artificial Intelligence or AI, for short, has been a subject of great interest in the last few years. Its understanding and implementation raise many questions about how our world will look like in the future. These matters have greatly impacted the legislative field, along with the fields of technology, security education - and the list stays open. This paper aims to highlight the main key aspects of AI, its current legal framework (or, rather, lack thereof), along with a more in-depth analysis of moral rights in the field of AI.

Keywords: artificial intelligence, technology, digital age, European Union.

1. Introduction

Philosopher and technologist Nick Bostrom famously mentioned: „*Machine intelligence is the last invention that humanity will ever need to make*”¹. That can be seen in a positive light, because once they become „intelligent” machines will make our day-to-day life easier. Or it can be seen as a warning - once computers gain the power to think like people, would us humans be of any use in the end?

But despite the controversies and even fear that artificial intelligence brings on, this phenomenon is not slowing down in the slightest. On the contrary, the private and public sector are allocating more and more resources in order to understand and develop AI. All this gives rise to new concerns, especially when it comes to the field of law.

Artificial intelligence or AI, for short, represents the intelligence that machines can express, in contrast to the natural intelligence of humans. As its name suggests, AI does not occur by itself in nature, although it is, in the end, a byproduct of natural human intelligence.

People exhibit intelligence that is developed naturally by birth and nurtured through education. Similarly, even animals can have manifestations that we recognize as „intelligent”. Some even express creativity, by producing art or musical pieces, like the paintings of Pigcasso the pig² and the NFTs created by Suda the elephant³. Some consider that even plants express intelligence or signs which we associate with intelligence, such as reacting to human affection, music or being repulsed when exposed to unpleasant words.

On the other hand, AI is the creation of machines that, in turn, are based on software and hardware created by humans. The difference is that humans only develop the machine, while the rest of the "work" is carried out further by the robot directly. Moreover, the intelligence of machines does not stagnate, but evolves over time when is "fed" with new data. Sometimes, the robot can even create its own new experiments and data to process, so it can continue growing by its own.

2. Fields where we find AI

AI can be found in many fields and their number is on the rise. For example, e-commerce is one of the most common areas where we find this technology on a daily basis. AI can generate a personalized online shopping experience based on our interests, previous shopping experiences and the clothes we currently have in our wardrobe. Also, with the help of chatbots⁴ we can shop more efficiently, without interacting with unpleasant shop assistants or losing time in brick-and-mortar facilities. Even Amazon announced they will soon implement chatbots, which will be a great improvement for the clients of the online shopping giant.

The field of education also had a lot to gain from the rise of AI. During the Covid19 pandemic, online courses became the rule, not the exception, in education. This did not only include Zoom classes, but also Virtual Reality

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¹ The present work only addresses the AI in relation to copyright. But artificial intelligence is also greatly involved in other intellectual property fields, as well, such as patents (see N.R. Dominte, *Inteligența artificială versus inteligența umană*, in RRDP no. 4/2019, pp. 89-97) and trademarks (see I. Chiriță, *Reflecții analitice despre cercetarea anteriorității mărcilor UE*, in RRDP no. 3/2019, p. 115).

² <https://pigcasso.org>, accessed on 11.10.2022.

³ <https://elephantartonline.com/collections/suda>, accessed on 11.10.2022.

⁴ Chatsbots like MobileMonkey (<https://mobilemonkey.com/>) and Giosg (<https://www.giosg.com/>) are already used by online businesses to interact with their customers and to issue automatic responses.

(VR)⁵ experiences, such as technical explorations inside spaceships or virtual surgeries for medical students. In addition to hyper-realistic experiences, AI is successfully used to make predictions in the educational field and optimize the quality of information provided to students. Once intelligent programs begin to analyse standardized tests used in education, as well as the results obtained by large samples of students, one can see possible errors more easily and make predictions for students taking such tests in the future. A big advantage of AI is that it can process large amounts of information very quickly, and tasks which would normally take teachers multiple hours of work can now be completed in minutes, with the right software program.

The creative field has also benefited greatly from the large-scale use of AI. Artificial intelligence has risen in popularity at the end of 2022 through a new internet trend, set on the border between entertainment and art: the creation of personal avatars by using a series of selfies uploaded to the Lensa mobile application⁶. These avatars were uploaded by individuals on various social media platforms, especially Facebook and Instagram. But this AI tool was also greatly criticized, firstly for legal reasons. Most of its users were not aware of the app's terms and conditions, which took over all copyright of their selfies. In other words, at the touch of a button you lost all rights over your own pictures. They could further be used for face detection, facial feature analysis, or other similar purposes. Another issue of Lensa was highlighted by the digital artist community. Because the software was extremely accessible at only 5 euros, this AI tool would rob many artists of their daily work and income. So, in the end, it seems very plausible that AI could „steal” jobs from humans in the future.

Content creation has also become much more convenient with the use of AI technology. Platforms like OpenAI's ChatGPT⁷, Jasper⁸ or Copysmith⁹ can create articles in a matter of minutes, on any subject you choose. This is a very convenient option for businesses who do not have the budget to hire big marketing firms for content creation. One of the most popular AI platforms that emerged at the end of 2022, also useful for accessing general information, solving math problems, even writing poems, is ChatGPT, a chatbot created by OpenAI¹⁰. Problem solving seems to be more accessible than ever, which could potentially put many professions in jeopardy, lawyers included¹¹.

AI is not seen as a threat only to various professionals, but also in the field of security. The use of artificial intelligence, especially unmanned vehicles in wars and international conflicts, has been a highly controversial subject¹². Another serious subject is data mining, which is closely linked to AI¹³. And while the environment can greatly benefit from AI and the modern technology it produces¹⁴, these new technologies involve a large investment of resources, which could also bring harm to our planet. Not to mention the ethical aspects of AI¹⁵ and the way it could be used to access and manipulate the human mind, including its potential criminal liability¹⁶.

All this reflects in the legal framework of AI - or rather, lack thereof, as we will show below.

3. The existing legal framework on AI

One of the biggest problems that AI poses at present, to lawyers and other legal professionals alike, is that we still do not have a set legal framework for this new type of technology. This legal void is found at all levels – internationally, at EU and at national level, in Romania.

At an international level, the most important act at present is the UNESCO global agreement on the ethics of AI¹⁷, which was adopted in November 2021 by the 193 Member States at their National Conference. The

⁵ Kavanagh, S., Luxton-Reilly, A., Wuensche, B. and Plimmer, B., *A systematic review of virtual reality in education. Themes in Science and Technology Education*, 10 no. 2 of 2017, pp. 85-119.

⁶ <https://www.cnn.com/2022/12/07/lensa-app-turns-selfies-into-avatars-with-artificial-intelligence.html>, accessed on 19.01.2023.

⁷ <https://chat.openai.com>, accessed on 19.01.2023.

⁸ <https://www.jasper.ai/>, accessed on 19.01.2023.

⁹ <https://copysmith.ai/>, accessed on 19.01.2023.

¹⁰ <https://openai.com/blog/chatgpt/>, accessed on 19.01.2023

¹¹ In USA, a robot-AI lawyer will be used for the first time for defence in court regarding a ticket. While we do not expect this kind of technology to be also used in Romania anytime soon, this is a very important step in the more generalised used of AI: <https://www.cbsnews.com/news/ai-powered-robot-lawyer-takes-its-first-court-case/>, accessed on 19.01.2023.

¹² For further details see A.-Al. Stoica, *A legal perspective on how unmanned vehicles will influence future conflicts*, Challenges of the Knowledge Society Journal 2022, pp. 426-434.

¹³ See M. Lupaşcu, *Text and data mining exception - technology into our lives*, Challenges of the Knowledge Society Journal 2019, pp. 905-915.

¹⁴ See Xiang, Xiao Jun, Qiong Li, Shahnawaz Khan and Osamah Ibrahim Khalaf, *Urban water resource management for sustainable environment planning using artificial intelligence techniques*, Environmental Impact Assessment Review vol. 86 of 2021, art. no. 106515.

¹⁵ AI has also been analysed alongside FoT or the Freedom of Thought, which also raises serious ethical issues. See McCarthy-Jones, Simon, *The Autonomous Mind: The Right to Freedom of Thought in the 21st Century*. Frontiers in Artificial Intelligence, Vol 2. Article 19, September 2019, SSRN: <https://ssrn.com/abstract=3456551>.

¹⁶ For an in-depth analysis on this subject, see Maxim Dobrinou, *The influence of artificial intelligence on criminal liability*, Challenges of the Knowledge Society Journal 2019, pp. 48-52.

¹⁷ <https://unesdoc.unesco.org/ark:/48223/pf0000381137>, accessed on 29.12.2022.

document is named „Recommendation on the Ethics of Artificial Intelligence” and is more similar to a white paper, than an actual agreement with set regulations. The Recommendations are set forth in a reader-friendly format, as a presentation filled with visuals. It contains quite general provisions for the member states, which is not unexpected, given the very name of the document and also its preamble: *„Recommends that Member States apply on a voluntary basis the provisions of this Recommendation by taking appropriate steps, including whatever legislative or other measures may be required, in conformity with the constitutional practice and governing structures of each State, to give effect within their jurisdictions to the principles and norms of the Recommendation in conformity with international law, including international human rights law”*.

The UNESCO agreement reminds the member states of the core values that should be kept when dealing with AI, such as respect for the human rights and fundamental freedoms, peace, diversity and inclusion, while focusing on the main fields that AI is expected to impact, like data policies, education, research and healthcare. Therefore, the Recommendations seem to have rather an educational purpose, than an actual regulatory one, by showing the world how artificial intelligence is expected to change our general way of life, as well as possible (and very general) measures that could be taken in order to make sure that its impact is safe and positive.

Going further, at a European level, there were several attempts to regulate the field of AI, but no definite results were reached until the present date. In April 2021 a proposal for a new regulation was issued „Laying down harmonized rules on artificial intelligence (artificial intelligence act) and amending certain union legislative acts”¹⁸, along with its annexes¹⁹. This was also called the Artificial Intelligence Act or AIA, for short. AIA was influenced by a previous EU document, a white paper on „Artificial Intelligence - A European approach to excellence and trust”²⁰. This white paper, as its name entails, does not offer an actual legal framework for artificial intelligence, but rather explains in a more philosophical manner the directions EU and the member states should take in future legislation²¹, in the context of AI advantages²², but also its risks²³.

The paper also makes an open invitation to comments on the said proposals. The consultations were open until May 2020²⁴. The Romanian state actually issued an official response²⁵ to AIA, by Senate dec. no. 110/2021 on the proposal for a Regulation of the European Parliament and of the Council establishing harmonized rules on artificial intelligence (artificial intelligence law) and amending certain legislative acts of the Union - COM(2021) 206 final. The Senate decision is quite concise – it shows that the EU document respects the principles of subsidiarity and proportionality, while offering a balanced approach in the field of AI and establishing a robust and flexible legal framework.

As for the content of AIA, the act starts with an explanatory memorandum, which show what AI is, how it can help society²⁶ and what previous steps were taken in the process of regulating AI²⁷: *„Artificial Intelligence (AI) is a fast evolving family of technologies that can bring a wide array of economic and societal benefits across the entire spectrum of industries and social activities.”*. After the memorandum, the document continues with

¹⁸ https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_1&format=PDF, accessed 27.12.2022.

¹⁹ The annexes are practically lists of items that complete certain articles from the regulations themselves -https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_2&format=PDF, accessed 27.12.2022.

²⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0065&from=EN>, accessed 27.12.2022.

²¹ *„If the EU fails to provide an EU-wide approach, there is a real risk of fragmentation in the internal market, which would undermine the objectives of trust, legal certainty and market uptake. A solid European regulatory framework for trustworthy AI will protect all European citizens and help create a frictionless internal market for the further development and uptake of AI as well as strengthening Europe’s industrial basis in AI.”*

²² *„Artificial Intelligence is developing fast. It will change our lives by improving healthcare (e.g., making diagnosis more precise, enabling better prevention of diseases), increasing the efficiency of farming, contributing to climate change mitigation and adaptation, improving the efficiency of production systems through predictive maintenance, increasing the security of Europeans, and in many other ways that we can only begin to imagine.”*

²³ *„The main risks related to the use of AI concern the application of rules designed to protect fundamental rights (including personal data and privacy protection and non-discrimination), as well as safety and liability-related issues”*

²⁴ *„The Commission invites for comments on the proposals set out in the White Paper through an open public consultation available at https://ec.europa.eu/info/consultations_en. The consultation is open for comments until 19 May 2020.”*

²⁵ <https://www.juridice.ro/750742/senatul-romaniei-considera-ca-legea-privind-inteligenta-artificiala-stabileste-un-cadru-juridic-robust-si-flexibil.html>, accessed on 30.12.2022.

²⁶ *„the use of artificial intelligence can support socially and environmentally beneficial outcomes and provide key competitive advantages to companies and the European economy”*.

²⁷ These mainly concerned previous discussions in the field of technology, which brought AI in question only sparingly, like the 2017 Conclusions of the European Council meeting regarding emerging trends, including AI (<https://www.consilium.europa.eu/media/21620/19-euco-final-conclusions-en.pdf>), the 2019 Conclusions on the Coordinated Plan on the development and use of artificial intelligence Made in Europe (<https://data.consilium.europa.eu/doc/document/ST-6177-2019-INIT/en/pdf>), the 2020 Presidency Conclusions which addressed concerns regarding AI systems (<https://www.consilium.europa.eu/media/46496/st11481-en20.pdf>), but also a report on AI and intellectual property from 2020 (https://www.europarl.europa.eu/doceo/document/A-9-2020-0176_EN.html) and AI on criminal matters ([https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2020/2016\(INI\)](https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2020/2016(INI))). As it shows, these documents were mostly opinions and report, not mandatory directions to guide us in our path to a safer and more efficient AI system of the future.

an actual proposal. It consists of the recitals²⁸ and the provisions, which list main definitions (including AI systems²⁹), prohibited AI practices, obligations of notification, conformity and transparency. It also establishes a European AI board and obliges the member states to each designate national authorities that will deal with AI conformity. The penalties set forth in the act for non-conformity are also very high, up to 30 Mil. Euro or 6% of a company's annual turnover³⁰.

When it comes to intellectual property and copyright, specifically, AIA does not provide relevant regulations³¹. And, even to this day, the general procedures for AIA and its mandatory applicability have not been finalized. We expect that various parts of this document will be updated in time, to keep up with the ever-changing technology of AI. We cannot help but see that the general tone used in the Regulations is mostly cautious, even fearful when it comes to these new technologies. Hopefully, this will change in time, given the more extensive exposure that the wide public (including our legislators) will have to AI in the coming years.

Among the more recent³² acts in the field of AI, we should also mention the Proposal for a Directive on adapting non-contractual civil liability rules to artificial intelligence³³ and the Proposal for Revision of the Product Liability Directive³⁴, both issued in September 2022 by the Commission³⁵. The first document should lead to harmonization of national liability rules in the field on AI, making it easier for victims of AI-related damage to receive proper compensation. And the latter aims to modernize existing rules on the liability of manufacturers for defective products.

Another relevant document for AI at EU level is the General Data Protection Regulations, GDPR for short. The European Parliament even issued a study, called „The impact of the General Data Protection Regulation (GDPR) on artificial intelligence”³⁶, which contains several interesting points. Although GDPR contains no actual mention of AI in its text, it does however contain legal provisions relevant to this field, including multiple referrals to automated decision-making which naturally involve AI. For example, according to art. 2 para. 1, GDPR applies to data processing which is either done manually or automatically³⁷. Also, the definitions for „processing”³⁸ and „profiling”³⁹, found in art. 4 are closely linked to automation. And when it comes to general automated decision-making and profiling, based on special categories of personal data, they are only allowed under specific conditions, which become important when it comes to information provided to the data subject by the controller, when personal data is collected from them (art. 13 para. 2⁴⁰), are not collected (art. 14 para 2⁴¹) and general

²⁸ The act lists no less than 89 paragraphs detailing the context for these regulations.

²⁹ „software that is developed with one or more of the techniques and approaches listed in Annex I and can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with”.

³⁰ The manner in which these regulations are set up reminds us greatly of GDPR and, once enforced, we expect to cause similar controversies and, most probably, difficulties in implementation within the member states.

³¹ The act only mentions copyright once, when referring to an older EU resolution from 2020, and intellectual property a few more times, in connection with transparency obligations and the attributions of national competent authorities in the field of AI.

³² There are also various older EU documents in the field of AI, for example the Report with recommendations to the Commission on Civil Law Rules on Robotics from 2017, https://www.europarl.europa.eu/doceo/document/A-8-2017-0005_EN.html, accessed on 27.01.2023. For a further analysis on this report see V. Roş, A. Livădariu, *Drepturile morale de autor în epoca inteligenței artificiale*, published in *Provocările dreptului de autor la 160 de ani de la prima lor reglementare legală în România*, Hamangiu Publishing House, Bucharest, 2022, p. 73. Also, an „honorable mention” should go to the famous CJEU dec. from 2009, Infopaq, that also seems to exclude computers from potential authors of works, because such works should „constitute the author's own intellectual creation”. For details on this subject see D. Manolea, *Drepturile de autor în contextul utilizării Inteligenței Artificiale*, <https://www.universuljuridic.ro/drepturile-de-autor-in-contextul-utilizarii-inteligenței-artificiale/>, accessed on 30.12.2022.

³³ <https://commission.europa.eu/select-language?destination=/media/48917>, accessed on 30.12.2022.

³⁴ https://single-market-economy.ec.europa.eu/document/3193da9a-cecb-44ad-9a9c-7b6b23220bcd_en, accessed on 30.12.2022.

³⁵ At the moment when this paper is written, the proposals are still in waiting to be adopted by the European Parliament and the Council. See https://ec.europa.eu/commission/presscorner/detail/en/ip_22_5807, accessed on 30.12.2022.

³⁶ [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU\(2020\)641530_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU(2020)641530_EN.pdf), accessed on 29.12.2022.

³⁷ Art. 2 para. 1 of GDPR: „This Regulation applies to the processing of personal data wholly or partly by automated means and to the processing other than by automated means of personal data which form part of a filing system or are intended to form part of a filing system”.

³⁸ Art. 4 para. (2) of GDPR: „‘processing’ means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction;”

³⁹ Art. 4 para. (4) of GDPR: „‘profiling’ means any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular to analyse or predict aspects concerning that natural person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movements”

⁴⁰ Art. 13 para. 2 of GDPR: „In addition to the information referred to in paragraph 1, the controller shall, at the time when personal data are obtained, provide the data subject with the following further information necessary to ensure fair and transparent processing: (...) (f) the existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.”

⁴¹ Art. 14 para. 2 of GDPR: „In addition to the information referred to in paragraph 1, the controller shall provide the data subject with the following information necessary to ensure fair and transparent processing in respect of the data subject: (...) (g) the existence of

right of access by the data subject (art. 15 para 1⁴²).

Given the absence of regulations at EU and international level, there is no wonder that Romania also lacks national legislation in the field of AI. While there are some opinions⁴³ saying that AI was actually regulated in Romania by Law no. 677/2001, it is not really the case. Law no. 677/2001 for the protection of individuals regarding the processing of personal data and the free movement of such data regulated data protection before GDPR and was abolished by the new EU regulations. Just like GDPR, it had no actual mention of artificial intelligence, but mentioned the idea of „automated means” of data processing⁴⁴, which may be close, but not really the same thing.

Therefore, at present, there is no Romanian law that governs AI. And given the multiple EU initiatives mentioned above, we do not expect there to be any in the near future⁴⁵. Although these legal initiatives are not completely finalized and prepared for implementation, they give hope that we will have European regulations in the future, which could potentially come in conflict with national law, if applicable. So probably the safest option for our legislators is to simply wait and implement EU laws in a correct and efficient manner, when they will become available.

4. Moral rights and AI

Moral rights in the field of copyright are regulated both at international level, by the Berne Convention, and at national level – including Romania, through Law no. 8/1996⁴⁶. While the Berne Convention only refers to two moral rights in art. 6 bis para. (1), namely the right to attribution and the right to the integrity of the work⁴⁷, the Romanian legislation on copyright holds a total of five moral rights, according to art. 10 of Law no. 8/1996⁴⁸: right to divulge a work, author’s right to their name, right to attribution, right to integrity and the right to retract a work.

But even if their number differs, the essence of moral rights stays the same, both at national and international level: they are closely connected to the author, even more than general economic rights⁴⁹. And according to Romanian law [art. 11 para. (1) of Law no. 8/1996], this link is so profound that one cannot renounce moral rights or transfer them freely. Some of them even survive the author’s death, being passed on to their heirs, according to art. 11 para. (2) of Law no. 8/1996.

Because moral rights are very personal and linked to the author so profoundly, AI tools pose big challenges to their existence. Who is the holder of moral rights for art created by a computer, will it be the machine itself? Or maybe the people who created the machine? Alternatively, can moral rights disappear completely when it comes to AI?

The matter of moral rights and AI has not been analysed in depth by the legal doctrine, to this day. But

automated decision-making, including profiling, referred to in Article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.”

⁴² Art. 15 para. 1 of GDPR: „The data subject shall have the right to obtain from the controller confirmation as to whether or not personal data concerning him or her are being processed, and, where that is the case, access to the personal data and the following information: (...) (h) the existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.”

⁴³ See the online article *Did you know that Artificial Intelligence has been regulated in Romania for 19 years?*, at <https://legalup.ro/inteligenta-artificiala-romania/>, accessed on 29.12.2022. We cannot help but notice the title was written rather in a clickbait manner, to attract page visitors, rather than being legally accurate.

⁴⁴ See art. 2 para (1), art. 3 point b), art. 13 para (1) point c) of Law no. 677/2001.

⁴⁵ On a separate note, the ELSA student association issued a press release in September 2021 with an open letter to the Romanian Parliament, offering a potential draft for an upcoming law on AI in Romania (<https://www.juridice.ro/748946/elsa-bucharest-lanseaza-o-scrisoare-deschisa-pentru-reglementarea-inteligentei-artificiale-in-romania.html>, accessed on 30.12.2022). The project is interesting, but we would rather see it as an act of civic involvement, rather than an actual legislation initiative that will be taken seriously by the Romanian legislative body (<https://www.juridice.ro/wp-content/uploads/2021/09/PROPUNERE-LEGISLATIVA-Romanti-Ada.pdf>, accessed on 30.12.2022).

⁴⁶ Romanian legislation also contains referrals to moral rights in the Civil Code. For more details on this subject see L. Cătuna, *Drept Civil. Proprietatea intelectuală*, C.H. Beck Publishing House, Bucharest, 2013, p. 71.

⁴⁷ Art. 6 bis para. (1) of the Berne Convention: „Independently of the author’s economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.”

⁴⁸ Art. 10 of Law no. 8/1996: „The author of a work has the following moral rights: a) the right to decide if, in what way and when the work will be brought to public knowledge; b) the right to claim recognition of the authorship of the work; c) the right to decide under which name the work will be brought to public knowledge; d) the right to claim respect for the integrity of the work and to oppose any modification, as well as any touch to the work, if it damages its honor or reputation; e) the right to withdraw the work, compensating, if necessary, the holders of the rights of use, prejudiced by exercising the withdrawal.”

⁴⁹ For more details about the legal regime or moral rights, see See V. Roș, *Dreptul proprietății intelectuale*, vol. 1, C.H. Beck Publishing House, Bucharest, 2016, pp. 315-323.

when it comes to copyright and who holds these rights, in what concerns the economic side, this has been discussed in detail and even contested in court. The Romanian local courts do not have a solid jurisprudence on the matter, but when it comes to international jurisdictions, the situation is quite different.

In 2020, the Beijing Intellectual Property Court from China was called to decide in *Gao Yang v. Youku* if AI generators are protected by copyright⁵⁰. The plaintiff had attached a camera to a flying balloon and that camera took automatic pictures in midair, which were later selected for further processing. The court decided that the photographic works were protected by copyright, because some human intervention still existed in this case⁵¹. So, until machines reach such a level that humans are no longer needed in their operations, the copyright system will not be altered.

In another court case from China, *Shenzhen Tencent v. Shanghai Yingxun*⁵², it was decided in 2019 that an article written with the help of AI technology is also protected by copyright legislation. The defendant, Shanghai Yingxun, published on their website an article developed with the help of AI tools belonging to the plaintiff, Tencent. The publishing was done without Tencent's permission and without giving credit to Tencent. The court decided that a copyright infringement had occurred and Tencent should be compensated accordingly. The reasoning behind this decision mentioned that the written work was not done completely autonomously by AI and some human activity still existed behind it⁵³.

However, the perspective of Chinese courts is somehow different from the one expressed in US jurisprudence. In 2018, an application was submitted to the US Copyright Office for the work „A Recent Entrance to Paradise”, with „Creativity Machine” listed as the author. The Copyright Office rejected the registration⁵⁴ and the decision was confirmed by the Review Board of the Office in 2022⁵⁵, decision which is in line with previous decisions of the US Supreme Court when it comes to creations that do not involve a human factor⁵⁶.

The U.S. decisions are also in line with the general national and international rules found in the field of copyright, which expressly show that copyrightable creations are the result of human activity and creativity⁵⁷. For example, art. 112-1 of the French Intellectual Property Code shows that a „work of the mind, regardless of its kind, form of expression, merit or purpose” is subject to copyright protection. Also, art. 3 para. (1) of the Romanian Law no. 8/1996 on copyright clearly states that a copyrightable work can only have „a natural person or natural persons” as authors, solution which is also supported by the legal doctrine⁵⁸. Therefore, a work created by a machine cannot be protected. This does not mean legislators are not open to changes⁵⁹ to some extent, following the general introduction of AI in our day-to-day lives.

So, in the end, who owns the copyright to AI creations? Will it be the IT specialists that developed the machine? Or will we admit that AI tools have a "life of their own" and can make copyright claims successfully?

Although we do not now have a clear legal framework to give us a clear answer to this question, there seems to be general consensus that rights to AI products cannot be held by the machine that created them. The main reason is that intellectual property and related creativity rights are specific to human beings, not robots. Therefore, the software program cannot be a holder of copyright.

⁵⁰ The court case was discussed in a WIPO report: https://www.wipo.int/export/sites/www/about-ip/en/artificial_intelligence/conversation_ip_ai/pdf/ms_china_1_en.pdf, accessed on 22.01.2022.

⁵¹ „Even if the factor of AI is involved, as long as the factors of human intervention are not completely ruled out, then the essence of the legal issues will not change fundamentally. Until the day comes that the technology evolves to the extent machines and systems, including AI, can completely be immune from human factors and operate independently, there is no necessity to adjust the existing copyright legal system”.

⁵² https://www.wipo.int/export/sites/www/about-ip/en/artificial_intelligence/conversation_ip_ai/pdf/ms_china_1_en.pdf, accessed on 22.01.2022.

⁵³ The conclusion of WIPO for both these cases from 2019 and, 2020, respectively, was that „AI has not yet developed to a level where it is truly free from human involvement (...) Thus, it is still quite possible to adapt the current legal copyright framework to the needs of copyright protection for those AI generated products. As for the copyright protection for those autonomous generated products of AI without any human intervention (...) It is still a bit early to draw conclusions.”

⁵⁴ <https://www.taylorwessing.com/en/insights-and-events/insights/2022/06/flash-ip>, accessed on 22.01.2022

⁵⁵ „Thaler must either provide evidence that the Work is the product of human authorship or convince the Office to depart from a century of copyright jurisprudence. He has done neither.” <https://www.copyright.gov/rulings-filings/review-board/docs/a-recent-entrance-to-paradise.pdf>, accessed on 22.01.2022.

⁵⁶ The decisions cited by the US Copyright Office did not involve AI tools, we are yet to see jurisprudence on this matter. But mentioned *Naruto v. Slater*, a case where copyright protection was denied for photos taken by a monkey and *Kelley v. Chicago Park Dist*, where protection was denied for the design of a garden, which was supposedly done directly by natural forces, not a human.

⁵⁸ See V. Roş, *op. cit.*, p. 160.

⁵⁹ Some countries introduced public consultations in the field of copyright and AI, the most relevant and recent one being the results published by the UK Intellectual Property Office. In short, it was considered that UK law does not need to change and remove copyright protection for computer-generated works without a human author and neither does patent law need to change, as to allow patent protection for AI inventions. <https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents>, accessed on 22.01.2022.

As for the person behind an AI software, they cannot be the holder of copyright, either. The IT specialists are humans and can potentially be authors. But they are not the real creators of the AI product, because their robots are. The IT specialists are not the creators of the final work, so they cannot be considered authors by law. Otherwise, we would have IT programmers without any inspiration or creative calling, being considered authors for millions of digital art pieces, NFTs and stories that their own AI tools have created. And, simply put, that is not the way that intellectual property works.

Therefore, we seem to be moving towards a middle-ground solution, where the product of AI tools, be it music, video or text, will be mostly found in open-source format, free for all users of the respective platform. One of the most popular AI platforms at present, ChatGPT has done exactly that: it „opened its doors” to users, free of charge. Also, we do not exclude the possibility of pre-paid software, like the avatar generator Lensa, which creates art that is free to use based on an initial payment plan. Even if the software is subject to licensing, that does not mean its developers can ask their users for more money in order to use the work, because it cannot be copyrightable in that way. Neither does the user become the copyright holder of the work. In other words, we will not have title holders over the creation in a „classical” way, this involving not only the patrimonial rights of the author, but especially the moral rights, that could only belong to a natural person.

As for the matter of moral right themselves, we consider the situation quite similar to patrimonial rights and even more straight-forward, to some degree. What we can rule out from the very beginning is the possibility of a machine holding moral rights over a work. Simply put, a computer could never invoke their right to attribution when it comes to an NFT they created. Or the right to integrity, if the article they composed is then altered by a human who publishes it online. Firstly, because despite the incredible advance of technology, we cannot imagine a computer being „touched” in their pride and dignity, human emotions at the core of moral rights themselves. Secondly, all sentiment aside, we have determined that a machine cannot even hold patrimonial rights, so general copyright over a work, because it is not an actually creative human being as the law demands. So neither can it hold moral rights over said work, because they are even more personal and specific to humans.

But what about the creator of the AI tool, could a software engineer hold moral rights when their invention produces works of art or literature? Here, again, we must refer to the general consensus on copyright and apply it *mutatis mutandis* in the very personal field of moral rights. While a computer program is considered creative work and subject to copyright, according to both national and EU regulations⁶⁰, these provisions do not automatically extend to „secondary” work produced by the program itself. In other words, an IT programmer will be deemed as author for the code they write, given their expertise in the field and the creative mind behind that work. But this IT specialist will not automatically also become a painter⁶¹ or a writer⁶², respectively.

Furthermore, when it comes to the person who actually uses the AI program to create artwork, they are even less eligible to be moral rights holders over the product of artificial intelligence. At a first glance, it might appear that the AI user has a certain degree of control over the result of the work. For example, they can get an avatar of their face from Lensa AI⁶³ by uploading selfies that they took in certain angles and light, so they would own copyright over the pictures. Or they could ask ChatGPT⁶⁴ to create an AI story with certain elements that they imagined with their own mind and the computer will comply. But in none of these cases is the user the actual author of the resulting work. They will only hold moral right and copyright, for that matter, if they design the avatar themselves in Photoshop or they write their own story, with originality and creativity. Otherwise, they are simply the users of an AI computer program, not creators in the legal sense.

Therefore, there is no other solution than to leave moral rights for the moment in a somewhat „legal void”, where no human, even less a machine, can hold such rights over the work created by AI. This work could be considered *open source*, a creation to which access is free and therefore cannot be copyrighted, because any user can access the program and use it to create new products.

There are also opinions in legal doctrine⁶⁵ that the entity with artificial intelligence could also hold intellectual property rights, without being considered an author in the legal sense. But we cannot agree with that opinion, because it would mean combining various legal institutions and going outside their own legal boundaries, which we do not see as plausible at the moment.

⁶⁰ See Directive 2009/24/EC on the legal protection of computer programs.

⁶¹ As in the case of the Midjourney platform which creates digital art <https://www.midjourney.com/>, accessed on 29.12.2022.

⁶² As in the case of Jasper AI, which can create blog articles <https://www.jasper.ai/>, accessed on 29.12.2022.

⁶³ <https://prisma-ai.com/lensa>, accessed on 29.12.2022.

⁶⁴ <https://openai.com/blog/chatgpt/>, accessed on 29.12.2022.

⁶⁵ See E.G. Olteanu, *Inteligența artificială, „ultima frontieră” pentru dreptul de autor*, published in *Provocările dreptului de autor la 160 de ani de la prima lor reglementare legală în România*, Hamangiu Publishing House, Bucharest, 2022, p. 129.

5. Conclusions

Although the subject of AI is still highly controversial, there is no doubt that this technology will continue developing and is definitely here to stay. That is the reason why we should all strive to understand it better, even if we work in the technology field, law or we are just normal citizens who start to find artificial intelligence more and more in their daily lives.

After a better understanding of AI technology by the general public, the next step would be to recognize that artificial intelligence really is the future and it creates opportunities for us all. It is a useful aid in our personal and professional activity, not an „enemy” that will steal our jobs and change our lives for the worst. Robots can considerably improve our lives, as well as our work, but they cannot fully execute human tasks - at least, not at the moment⁶⁶. So we can safely assume that humans are and will continue to be needed in our society, not only as beneficiaries of work done by robots, but also as doers and creators.

That is where intellectual property and, more specifically, moral rights hold such a definitive role. They remind us that, at the end of the day, only humans are blessed with creative powers by a higher being and only they can exercise patrimonial, but most importantly, non-patrimonial rights in the field of copyright. That is why we strongly require better regulations on AI - a clear legal framework that help this technology develop at a faster pace and in a safe environment, in harmony with the human mind, not working against it.

Although the conclusion that robots cannot hold and exercise moral rights is quite straight forward, the subject remains open to debate. Laws and the perception of humans change in time, just like technology does. And what today seems impossible, could be the new normal of tomorrow. So who can say that the next generation of robots will not be more „human” than ever, along with the respective privileges? Only time will tell.

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⁶⁶ A.-M. Nedelcu, *Qualitative research in the development and implementation of artificial intelligence in economy*, Challenges of the Knowledge Society Journal, 2021, p. 871.

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