

THE INEFFECTIVENESS OF THE PROVISIONS OF THE COPYRIGHT DIRECTIVE AND THE AI ACT IN THE PROTECTION OF COPYRIGHT

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Abstract

The present paper examines the extent to which regulations adopted at the level of the European Union prior to the development of artificial intelligence during the period 2022–2025, as well as the more recent European Union regulations in the field of artificial intelligence, provide adequate instruments for the protection of copyright and related rights in connection with the functioning and training of artificial intelligence systems. Starting from the scale of adoption of artificial intelligence programs, the paper highlights the legal tensions generated by the capacity of such systems to process databases and considerable volumes of pre-existing content, often protected by copyright. The analysis focuses on the correlation between Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market (“Copyright Directive”) and Regulation (EU) 2024/1689 laying down harmonized rules on artificial intelligence (“Artificial Intelligence Act”), with particular emphasis on the regime of “text and data mining” and on the “rights reservation” mechanism provided for in Article 4 of the Copyright Directive. The paper underlines the insufficiently regulated nature of the opt-out modalities, as well as the practical limitations of this mechanism, including in situations where text and data mining is carried out outside the territory of the European Union. In parallel, the obligations imposed on providers of general-purpose artificial intelligence models are examined, in particular the obligation to adopt and implement an internal policy ensuring compliance with European Union law on copyright and related rights, as well as the transparency obligation concerning the publication of a sufficiently detailed summary of the protected data used for training purposes. In conclusion, the paper demonstrates that, although the two legislative acts should not be regarded as antagonistic, their combined application does not, in their current form, lead to sufficient solutions for the effective protection of right holders, thus necessitating normative intervention adapted to the new technological realities.

Keywords: artificial intelligence; copyright; Copyright Directive; Artificial Intelligence Act; data mining.

1. Introduction

This paper examines whether the current European Union legal framework provides effective protection for copyright and related rights in the context of the training and operation of artificial intelligence systems, with particular focus on the interaction between Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market (“Copyright Directive”) and Regulation (EU) 2024/1689 laying down harmonized rules on artificial intelligence (“AI Act”). More specifically, the paper addresses the extent to which the legal regime of text and data mining, especially the opt-out mechanism set out in Article 4 of the Copyright Directive, together with the obligations imposed by the AI Act on providers of general-purpose AI models, are capable of ensuring real and effective protection for right holders.

The subject takes into consideration the unprecedented expansion of artificial intelligence systems has fundamentally changed the scale at which protected content may be accessed, reproduced, processed and incorporated into technological systems. Unlike earlier technological developments, generative AI models rely on the large-scale analysis of pre-existing content, much of which is protected by copyright or related rights. As a result, the legal debate must also address the prior use of protected works in the training and functioning of such systems. This issue is particularly significant in European Union law, where intellectual property enjoys the status of a fundamental right and where the effectiveness of legislative protection must be assessed against the realities of rapidly developing technology.

In order to answer this question, the paper undertakes a normative and systematic analysis of the relevant provisions of the Copyright Directive and the AI Act. It examines, first, the legal logic and practical limitations of the text and data mining exception, with emphasis on the insufficient regulation of rights reservation

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mechanisms and on the difficulties faced by right holders in exercising an effective opt-out. Secondly, it analyses the obligations imposed by the AI Act on providers of general-purpose AI models, especially the duty to adopt an internal copyright compliance policy and the duty of transparency regarding training data. On that basis, the paper evaluates whether the combined application of these two instruments offers substantive protection or merely creates an appearance of regulatory coherence while leaving significant gaps unresolved, including in cross-border and extraterritorial scenarios.

This paper concentrates on the relationship between these two legislative instruments as a mechanism of protection for pre-existing works used in AI training. It therefore builds on the existing specialized literature concerning text and data mining, copyright limitations and the extraterritorial implications of the AI Act, while arguing that the current framework remains structurally insufficient. The central thesis advanced is that the Copyright Directive and the AI Act should not be understood as antagonistic norms, but that, in their present form, they fail to provide an adequately effective legal response to the new technological realities generated by artificial intelligence.

2. The European Context of Artificial Intelligence and Intellectual Property

Intellectual property law is constantly new, continuously renewing itself in order to adapt to reality¹. Unlike, for example, the law of obligations in Roman law, which resembles current provisions or which is almost identical under certain aspects, intellectual property law has undergone a significant evolution alongside the technological development of humanity.

The more recent past of intellectual property law begins, according to some authors, with the Venetian Patent Statute of 19 March 1474. Obviously, from the perspective of creation and the methods of creation, the reality of the year 1474 is not reflected in the reality of the 21st century. However, with particular reference to copyright and related rights, these have managed to constantly adapt to technological evolution. From handwritten texts on paper, to the emergence of printing and up to the emergence of photography, the law has managed to regulate reality.

Today, technological evolution appears to exceed human expectations and to surpass even the human capacity to fully understand the current stage of technology and the consequences it may have on society in all its aspects, not only on creation. With regard exclusively to the issue of creative activity, I consider that humanity is facing, for the first time, a so-called entity that is equal or, from certain perspectives, superior within the ecosystem of entities capable of creation. Of course, until this moment, humanity only had the task of regulating what humans could create. However, at present, the evolution of artificial intelligence programs has given humanity a new task: to regulate the functioning and the creations of its own creation. It is thus observed that, for the first time in history, what humanity has developed continues to develop, even autonomously.

Although, as will be shown *infra*, European Union law has contributed substantially to the regulation of intellectual property law, I consider that the moment when technology surpassed the capacity of humans, namely of the European Union, to regulate technological evolution in a current manner was the end of the year 2022, with the launch of the artificial intelligence program ChatGPT. This was made available to the public, free of charge, and the public adopted this technology at an unimaginable speed.

Considering that this new technology could be accessed through already existing and established technologies since the emergence of the internet, namely the mobile phone or the computer, the number of users reached impressive thresholds within a short period of time. More precisely, in 2025, the company that created the artificial intelligence program ChatGPT indicated that there are approximately 800 million weekly users². It must also be taken into account that these represent only the average number of users who access the ChatGPT program on a weekly basis. Not all users use this program weekly and not all users use ChatGPT. In only three years, numerous programs have developed exponentially, including: Gemini, developed by Google, Grok, developed by xAI, Claude, developed by Anthropic, Copilot, developed by Microsoft, LLaMA, developed by Meta. Of course, the enumeration may continue.

¹ V. Roș, A. Livădariu, C.-R. Romițan, *Dreptul de autor și drepturile conexe și drepturile de proprietate industrială*, Ed. C.H. Beck, Bucharest, 2025, p. 5.

² OpenAI, *1 million business customers: the fastest-growing business platform in history*, informational material published on the OpenAI platform, available at: <https://openai.com/index/1-million-businesses-putting-ai-to-work/>.

Moreover, once we also take into account artificial intelligence programs that we use passively, without acting with the intention of using them, it can be observed that the scale of artificial intelligence programs not only cannot be ignored, but also leads to the conclusion that humanity is required to advance more rapidly than its own creations in order to regulate them. One example is the AI Overviews function created by Google and integrated into its search engine, a search engine used by an overwhelming majority of internet users. The AI Overviews function entails that the Google search engine, before providing the list of web pages accessible according to the user's query, displays a summary of those web pages, created by an artificial intelligence program. According to the company's statements, approximately 2 billion people access this function monthly.³ For a better illustration of the magnitude of the numbers mentioned above, it should be noted that the entire resident population within the European Union amounts to only 450 million people.⁴

Another aspect that must be taken into account in the development of current regulations, distinct from the scale of use of this technology, is the unimaginable capacity of artificial intelligence programs to process databases, whether they contain data in the form of text, sound or images. This capacity to process databases represents both the premise of the usefulness of artificial intelligence programs and the source of one of the main current legal tensions. Unlike previous technologies such as the use of the internet, which involved direct human intervention in the process of inspiration followed by creation, artificial intelligence programs operate based on the autonomous analysis, correlation and generalization of considerable volumes of pre-existing content, content which, in numerous situations, is protected by copyright or related rights.

Although the main issues appear, at first glance, to be related to the result created through artificial intelligence, the protection of past and present human creations must also be taken into account. In numerous instances, the main question appears to be "Who is the author of the work created by the artificial intelligence program?" or "Is the work created by the artificial intelligence program capable of protection under copyright?". This perspective, however, has led to legislative gaps or uncertainties regarding the protection of works that may be accessed through the internet or that are found in databases accessible to companies that train the models underlying artificial intelligence programs used by the public.

The present paper aims to analyze the extent to which regulations adopted at the level of the European Union prior to the development of artificial intelligence during the period 2022–2025, as well as the more recent European Union regulations in the field of artificial intelligence, provide adequate instruments for the protection of copyright and related rights in relation to the functioning and training of artificial intelligence programs.

3. Intellectual Property Law and Artificial Intelligence in European Union Law

Firstly, in order to illustrate the importance conferred upon the protection of intellectual property by the European Union, it must be emphasized that it constitutes a fundamental right provided for in the Charter of Fundamental Rights of the European Union, Article 17(2) expressly stipulating that "Intellectual property shall be protected".

At the same time, it should be noted that the Treaty on the Functioning of the European Union contains multiple references to intellectual property rights. For example, Article 118 contains provisions concerning "the creation of European intellectual property rights to provide uniform protection of intellectual property rights throughout the Union, as well as the setting up of centralized Union-wide authorization, coordination and supervision arrangements".

Secondly, although intellectual property law is fragmented across multiple regulations and directives of the European Union, being sufficiently diverse such that the establishment of uniform rules is quasi-impossible, it may be observed that ensuring uniform protection at the level of the European Union for the various forms of intellectual property rights represents a priority of the Union.

As early as the beginning of the 1990–2000 period, with the objective of completing the internal market pursuant to the Single European Act, which entered into force in 1987, multiple norms were adopted pursuing a dual purpose. Primarily, the harmonization of the legislation of the Member States was sought. Secondly, these norms aimed to modernize the legislation of the Member States.

³ Google, *A new era of intelligence with Gemini 3*, , press release published on the Google blog, available at: <https://blog.google/products/gemini/gemini-3/#note-from-ceo>.

⁴ Maria Constantinoiu, *Populația UE a ajuns la un nivel record, de 450,4 milioane. Migrația este singurul motor care stă la baza creșterii*, 11.07.2025, available at: <https://www.digi24.ro/stiri/externe/populatia-ue-a-ajuns-la-un-nivel-record-de-4504-milioane-migratia-este-singurul-motor-care-sta-la-baza-cresterii-3322467>.

A first relevant example is the adoption of Directive 91/250/EEC on the legal protection of computer programs. This represented a first significant instrument through which the European Union explicitly recognized the specific nature of digital creations and the necessity of a protection regime adapted thereto.

A second example, which addressed the technological evolution of that period, is the adoption of Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, a directive which establishes a protection regime for databases focused on safeguarding investment. At the same time, it remains relevant at present, in the context of the massive use of data for the training of artificial intelligence models.

Subsequently, and of central relevance to the present paper, in the context of the exponential development of information technology since the beginning of the 21st century, Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC (hereinafter referred to as the “Copyright Directive”) was adopted. The premise underlying this Directive, as reflected in recital (3) of its preamble, is that “rapid technological developments continue to transform the way works and other protected subject matter are created, produced, distributed and exploited. New business models and new actors continue to emerge. Relevant legislation must be designed in a way that allows for its future application and does not limit technological developments.”

The Copyright Directive constitutes one of the principal instruments of normative modernization, aiming to adapt the protection of copyright to the new technological reality of the creation, distribution and exploitation of works. More specifically, it brings copyright into the era of the internet and social media platforms, where any form of content—whether text, photography or video—is made available to the public in an unprecedented manner.

Of particular relevance to the use and training of artificial intelligence systems, although not a central concern at the time of its adoption, is the fact that the Directive contains provisions relating to text and data mining.

As regards artificial intelligence technology, it has not been an unknown subject for the European Union legislator. Although, in the collective consciousness, artificial intelligence appears as a relatively recent phenomenon, it has been considered by legal scholars since the previous century. The term “artificial intelligence” is attributed to John McCarthy, who coordinated the paper “A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence” of 31 August 1955⁵. From that moment onwards, society has been concerned with the implications that this type of technology may have on society as a whole. Subsequently, with the development of artificial intelligence technology and its implementation, the need for its regulation became apparent.

The High-Level Expert Group on Artificial Intelligence, appointed by the European Commission, issued in 2019 the “Ethics Guidelines for Trustworthy AI”, representing a first step towards the future so-called AI Act, namely Regulation (EU) 2024/1689. At that time, the Guidelines had the limited role of establishing seven requirements for an artificial intelligence system to be considered trustworthy. Subsequently, in 2020, the European Commission put forward the “White Paper on Artificial Intelligence – A European approach to excellence and trust”, which outlined the main directions for the future regulation of artificial intelligence technology.

The year 2021 marked the beginning of the legislative process for the adoption of the Artificial Intelligence Regulation, with the European Commission submitting the initial Proposal 2021/0106(COD) for a “Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts”.

Until the adoption of the Artificial Intelligence Regulation in 2024, the paradigm shift brought about by the launch of the artificial intelligence program ChatGPT in 2022 led to numerous debates and even amendments, in order to adapt the proposed regulation to emerging risks. More precisely, prior to its adoption, in 2023, the necessary changes were introduced to ensure that the future Artificial Intelligence Regulation would be readily applicable to generative artificial intelligence models, a technology that is now regarded as the principal method of implementing artificial intelligence.

⁵ J. McCarthy, M. L. Minsky, N. Rochester, C. E. Shannon, *A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence*, 1956, available at: <https://www-formal.stanford.edu/jmc/history/dartmouth/dartmouth.html>.

Ultimately, Regulation (EU) 2024/1689, the Artificial Intelligence Act, was adopted in 2024, representing the first legislative act to establish a comprehensive legal framework for artificial intelligence technology. An essential feature emerging from the structure of this act is the qualification of artificial intelligence within a framework similar to that applicable to products, in the sense that it is subject to ex ante requirements of conformity, assessment and control, specific to product safety law.

4. Copyright Directive and the AI Act: Text and Data Mining

As previously mentioned, the Copyright Directive created a new framework for the protection of copyright in the digital environment. With regard to text and data mining for general purposes, as opposed to research purposes, Article 4 of the Copyright Directive establishes an opt-out mechanism, namely a reservation of rights not to permit entities to carry out text and data mining on works and other protected subject matter that are lawfully accessible. Thus, where a right holder has exercised this reservation of rights, entities performing text and data mining activities, such as developers of artificial intelligence systems, may no longer rely on the exception provided for under Article 4 of the Copyright Directive and are required to obtain the authorization of the right holder in order to reproduce such works for the purposes of text and data mining.

The manner in which an author may opt for their works not to be available for text and data mining is inadequately regulated. Article 4(3) provides that such an opt-out may be expressed by means “such as machine-readable means in the case of content made publicly available online”. However, it remains unclear what constitutes such machine-readable means. One may consider, for instance, a standard protocol such as robots.txt, or a protocol based on it⁶. However, there is no standard expressly referred to by the applicable legal framework.

However, it is submitted that the Copyright Directive, adopted prior to the development of generative AI technologies, prioritizes the protection of technological innovation rather than that of copyright. This conclusion derives from three aspects: Firstly, the technical method for expressing a reservation of rights may be unknown or difficult to access for authors. Given that the dissemination of works on the internet is devoid of any difficulty, without requiring, for example, that a user of a simple blog-type website possess technical knowledge in order to publish a work, it is disproportionate to impose on the right holder the burden of adopting significantly more advanced technical measures in order to protect their work. Secondly, it must be taken into account that the online environment is one in which works are routinely disseminated without the authorization of the right holder, such that the latter would be required to undertake steps to ensure that their work is not subject to text and data mining from any source. Admittedly, the exception provided for by the Copyright Directive applies only to works that are lawfully accessible, but this does not constitute a sufficient measure for the protection of right holders. Thirdly, text and data mining activities may take place outside the territory of the European Union, thereby rendering the rights reservation mechanism ineffective.

A further element that must be taken into account in the analysis of the text and data mining regime carried out by developers of artificial intelligence systems is the very nature of the Copyright Directive as a directive. Pursuant to Article 288 of the Treaty on the Functioning of the European Union, “a directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods”, whereas “a regulation shall have general application. It shall be binding in its entirety and directly applicable in all Member States”. It should also be noted that the Copyright Directive provides, under Article 25, that “Member States may adopt or maintain in force more extensive provisions”. Consequently, only the fundamental provisions of the Copyright Directive are applied uniformly, while Member States retain the ability to design stricter regimes. In Romania, for instance, the Directive was transposed by Law No. 69/2022 amending and supplementing Law No. 8/1996 on copyright and related rights.

The Artificial Intelligence Act, although it does not have as its primary objective the protection of copyright, contains provisions intended to ensure such protection. These provisions aim to harmonize compliance with copyright in the context of the training of artificial intelligence models, but they focus on references to the specific legislation governing intellectual property law. It can be observed, even from the preamble of the Artificial Intelligence Act, that it is not intended to constitute a genuine means of protection, but rather to frame the existing legislation within the context of regulating artificial intelligence primarily as a product. Recital (105)

⁶ Paul Keller, *Generative AI and copyright: Convergence of opt-outs?*, Kluwer Copyright Blog, 2023, available at: <https://legalblogs.wolterskluwer.com/copyright-blog/generative-ai-and-copyright-convergence-of-opt-outs/>

of the preamble of the Artificial Intelligence Act states that any use of copyright-protected content requires the authorization of the right holder concerned, unless relevant copyright exceptions and limitations apply. Directive (EU) 2019/790 introduced exceptions and limitations which allow reproductions and extractions of works or other protected subject matter, for the purposes of text and data mining, under certain conditions, thereby confirming the exception provided for by the Copyright Directive. Thus, the risk that the regime governing the training of models underlying artificial intelligence systems may lack the capacity to protect the interests of copyright holders is apparent even from the preamble.

Moreover, it must be recalled that the Copyright Directive was adopted in 2019, and that Article 30 thereof provides that any review of the Directive shall take place “no sooner than 7 June 2026”. With a review of a directive adopted prior to the expansion of artificial intelligence technology, the regulation of such technology by reference to legislation already overtaken by technical developments can only result in deficiencies.

In line with the ideas reflected in the preamble of the Artificial Intelligence Act, it provides for two key obligations under Article 53(1)(c) and (d), aimed at increasing transparency and safety with regard to compliance with European Union law. Firstly, providers of general-purpose artificial intelligence models, namely those capable of performing a wide range of distinct tasks, are required to adopt and implement an internal policy ensuring compliance with European Union law on copyright and related rights and to identify and comply with rights reservations expressed pursuant to Article 4(3) of the Copyright Directive. The second obligation consists in the publication of a sufficiently detailed summary of the protected data used for training the artificial intelligence model, in accordance with the standards established by the AI Office.

The first of these obligations is of particular interest in the present paper, especially in light of recital (106) of the preamble, which provides, with regard to compliance with rights reservations expressed under the Copyright Directive, that any provider placing a general-purpose AI model on the Union market should comply with this obligation, regardless of the jurisdiction in which the relevant copyright-related acts underlying the training of such general-purpose AI models take place.

This approach, similar to the regulatory framework in the field of product safety and, through its close connection with the Copyright Directive, results in the creation of an extraterritorial effect of European copyright law. In practice, whenever a provider of artificial intelligence systems intends to place such a system on the European market, it will have to ensure that even the training carried out outside the territory of the European Union complies with the Copyright Directive. However, a first issue that may be raised concerns the territoriality of copyright law⁷. The act of reproduction of a work is, as a rule, governed by the law of the State in which such reproduction takes place. However, in the case of the training of artificial intelligence models intended to be placed on the European Union market, this limitation is exceeded.

In the legal doctrine⁸, it has been argued that this interpretation could be regarded as “maximalist”, given that the provisions of the preamble do not constitute operative articles of the Artificial Intelligence Act and do not have direct applicability. Nevertheless, it is submitted that this is the only interpretation worthy of consideration. Given that artificial intelligence systems are treated in a manner similar to products placed on the European Union market, such extraterritoriality should not give rise to major concerns.

By reference to the example of a product such as a toy manufactured in a third country using materials hazardous to children’s health, which cannot be marketed within the European Union, one may reach the conclusion that a system created through processes that are harmful to right holders within the European Union cannot be placed on the Union market. More precisely, it must be taken into account that an artificial intelligence system trained on protected materials, even where such activity has taken place in a third country, is inherently flawed and will generate harmful outcomes.

As regards the second obligation imposed on providers of general-purpose artificial intelligence models, namely the obligation of transparency concerning the sources used in the training of such models, this would become partially ineffective if the rights reservation provided for by the Copyright Directive did not produce effects beyond the territory of the European Union. Consequently, even in the absence of an explicit provision, save for recital (106) of the preamble, it is evident that the intention of the legislator was to ensure that any artificial intelligence system placed on the Union market complies with its rules.

⁷ João Pedro Quintais, *Copyright, the AI Act and extraterritoriality*, Kluwer Copyright Blog, 2024, available at: <https://legalblogs.wolterskluwer.com/copyright-blog/copyright-the-ai-act-and-extraterritoriality/>

⁸ João Pedro Quintais, *idem*.

As previously shown, pursuant to Article 25 of the Copyright Directive, Member States have the ability to transpose this Directive into national legislation, including by strengthening the standards applicable to entities carrying out text and data mining activities. Therefore, it is possible that, within the Member States, there exists applicable legislation whose central aim is the protection of copyright to the detriment of technological development.

Even in this context, the standards applicable to providers of artificial intelligence systems with regard to text and data mining, regardless of the efforts of Member States to protect the rights of copyright holders, will remain minimal. As previously noted, the Copyright Directive is not directly binding in its form upon Member States, which are only required to adopt the legislative measures necessary to achieve its objectives. By contrast, the Artificial Intelligence Act is directly applicable within the Member States.

It must be emphasized that the references contained in the Artificial Intelligence Act, at least with regard to the rights reservation of copyright holders, refer exclusively to the provisions of the Copyright Directive, without in any way mentioning an obligation on providers of artificial intelligence models to comply, as a priority, with the legislation of the Member States.

Accordingly, irrespective of the provisions of a Member State concerning the reservation of rights, a provider will always be able to rely on the Artificial Intelligence Act, adopted subsequent to the implementation of the Copyright Directive, which refers to the minimum conditions established by the Directive. This normative solution, although coherent from the perspective of the hierarchy of Union acts, raises serious concerns regarding the effectiveness of copyright protection, as it places right holders in a legally inferior position to that of technology providers, who benefit from a minimal, uniform and predictable compliance regime.

Since 2019, when the Copyright Directive was adopted, 2022, when the artificial intelligence system ChatGPT was introduced to the market, and 2024, when the Artificial Intelligence Act was adopted, sufficient shortcomings, questions, and new answers have emerged to allow the forthcoming review of the Copyright Directive to be adapted to the present reality. Although technological progress has been largely unforeseen, and developments in the field of artificial intelligence continue to occur at an accelerated pace through the enhancement of existing systems and the constant emergence of new models, it is submitted that society, and in particular the legislator, has already acquired a sufficient degree of familiarity with this technology to enable coherent and responsible normative intervention.

5. Regulation of copyright with regard to outputs created by artificial intelligence systems

The legislation referred to in the present paper concerns the protection of works created by humans and made available in the online environment or in databases used by providers of general-purpose artificial intelligence models, such as OpenAI.

What remains far from being settled is the status of so-called works created by or with the assistance of artificial intelligence systems. The Copyright Directive, as previously shown, was adopted at a time when AI-generated content did not exist within the social consciousness and did not constitute a concern except for visionary researchers who anticipated today's reality and sought to address it. At the same time, the Artificial Intelligence Act aims to regulate this technology in a general manner, as a product, in order to protect society from the negative effects of artificial intelligence, such as systemic risks generated by the uncontrolled use of automated systems, the infringement of fundamental rights, the lack of decision-making transparency, algorithmic discrimination, or the compromise of user safety and security. In this regard, the Artificial Intelligence Act adopts a risk-based approach. However, the combined application of these two instruments does not lead to any conclusion as regards AI-generated content.

While the functionalities of these systems are beginning to become predictable, the results of their use by humans are only now beginning to emerge. A relevant example of the creative ways in which humans use this technology was provided by Alina Trapova in a lecture delivered at University College London in 2023. She describes two of the works exhibited at the exhibition "Je est un autre ?", presented at CENTQUATRE-PARIS: "Le Phare d'Alexandrie 1.1" and "Le Temple d'Artémis à Éphèse 1.1" by Collectif Obvious. The three artists of the collective selected seven texts originating from Antiquity describing the Seven Wonders of the Ancient World and input them into an artificial intelligence system in order to generate seven digital images. Subsequently, a painter reinterpreted the images generated by the artificial intelligence system into classical oil paintings. The

works created by the painter were later integrated into an application allowing each work to be animated on mobile devices, thereby adding a layer of augmented reality.

As can be observed, the diversity of the forms of use of artificial intelligence, as well as the degree of creativity demonstrated by artists in integrating such technologies into the artistic process, generates real difficulties in determining the legal status of content generated through artificial intelligence systems. In this context, only a cumulative approach, resulting from the contribution of legal doctrine, case law, and the continuous evolution of legislation, will, over time, lead to the development of coherent and predictable solutions to this issue.

6. Conclusions

The parallel analysis of the two acts, the Copyright Directive and the Artificial Intelligence Act, reveals a regulatory framework in transition, both in terms of the relationship between the two instruments and their interaction with continuously evolving technology. Both acts are undoubtedly ambitious and aim to adapt society as a whole to a new status quo in which humans and technology interact not merely as user and tool, but, in certain contexts, as partners.

The Copyright Directive was adopted far too early in relation to the astonishing evolution of artificial intelligence technology, while the Artificial Intelligence Act was designed to address issues of a much broader and more pressing nature for society as a whole, the aspects currently regulated being capable of affecting any member of society, and not only copyright holders whose works are distributed via the internet or are contained in databases that may be used by providers of artificial intelligence systems.

As regards copyright, the Artificial Intelligence Act has, for the time being, merely relied on the existing regulatory framework without introducing substantive innovation. From the analysis of the two acts and the deficiencies arising therefrom, it may be observed that they should not be regarded as antagonistic, but rather as being in a stage that allows both legislators and legal practitioners to construct a new framework adapted to a context in which humans are no longer the sole creative entity.

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