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Why works created autonomously by artificial intelligence (should) belong to the public domain – a viewpoint based on droit d'auteur traditions

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ABSTRACT

The authorship and protection framework of works autonomously generated by artificial intelligence has, for some years now, been one of the hottest topics in copyright law. Seeking solutions, we look at the development and differences of European traditions, focusing on how the concept of the intellectual creator as the author was pivotal from its inception. We then address how this perspective developed implicitly or explicitly to a requirement of human authorship in national, regional, and even international regulations. We note the complex process of balancing the various interests involved in copyright and how the system tries to harmonise them, sometimes unsuccessfully. In conclusion, we point out possible and reasonable alternatives to protect autonomously generated works, highlighting how and why the public domain thesis should be the standard position (although neighbouring rights may still apply), at least in countries that follow the *droit d'auteur* tradition.

KEYWORDS

artificial intelligence, copyright, public domain, European, Portuguese

NOTE

This article is original, yet based on an updated and complemented translation of sections of the author's dissertation thesis, published under a CC0 license in Portuguese on December 18, 2020, in the University of Coimbra repository. The original thesis is available here: https://estudogeral.sib.uc.pt/handle/10316/92751

Introduction

Amongst jurists interested in technological issues, we commonly notice a dazzlement that, at times, leads to a sidelining of laws and legal principles. The law scholar becomes a technology evangelist, relegating their own field of study and work to a subordinate position. It has become a usual practice among researchers in this field to indiscriminately suggest changes in legal norms to adapt them to new technologies.

In this short article, we argue that the primary legal discussion and the fundamental conceptual debate are the most critical aspects of the dispute around copyright protection for works entirely created by artificial intelligence (AI) – or, in other words, autonomously generated works. After all, new technologies not only present new problems, but also highlight the need to re-examine some of the oldest problems in copyright law (Dias Pereira, *Informática, Direito de Autor e Propriedade Tecnodigital* 189–90). We consider the latter the most important aspect of scholarship studies, which is often marginalised in the pursuit of protecting economic interests.

This prior discussion is crucial, because legal changes to encompass new interests should not be the first option when there is an evolution in the law's context. On the contrary, as we see it, this should occur only when the amendment is reasonably demonstrated to be necessary, i.e., when the net evaluated losses of society exceed the losses of maintaining the status quo, or when a fundamental right is being violated, in case this violation is not justified by weighing it against another right of the same category. Established rules should be given precedence whenever possible, when considering the costs of both the legislative process and applying increasingly complex legal systems by judges or other agents (Jones; Kaminski 589–93).

It is fruitful to avoid the tendency to suggest radical changes in legal systems developed and refined over decades or centuries by processes that usually have at least a minimal degree of legitimization and internal compatibilization through judicial interpretations or legislative adjustments. Unnecessary or sudden changes contain a remarkable potential to result in inconsistencies with the rest of the legal system, or even to become quickly dated and restrictive, as has already occurred on so many occasions with copyright laws in response to the advances of the informational society. After a legal reform is implemented, its reversal is much more difficult, as the special right of the database maker in the European Union has already shown (Reda 295–304).

Portuguese scholarship, which makes up a large part of the bibliography used, is particularly fertile for the type of research we propose to do here, both for its zeal for legal dogmatics and for the importance that intellectual property has in the country's legal culture, as well as a noticeable pro-public interest approach orientation in comparison to European standards. [1]

Development and Differences of International, Regional and National Copyright Families

[1] We can see this clearly in the work of José de Oliveira Ascensão (University of Lisboa), widely recognised as the most influential scholar of modern Portuguese copyright literature. But even notable names and the greatest living representatives of "competing" Portuguese traditions, such as Alexandre Libório Dias Pereira (University of Coimbra), also usually follow markedly critical approaches.

It is known that there are historical mentions of copyright-like rights in Classical Greece, the Roman Empire (Branco 89; Dias Pereira, *Direitos de Autor e Liberdade de Informação* 49–50; du Bois 7), and also an extensive system of granting privilege in Medieval Europe (Fragoso 47–49). However, it is with the bourgeoisie's consolidation of power that we observe the transformation of these institutes into something more like a property of the author, either abruptly, as in France, or gradually, as in the United Kingdom and Germany (Branco 118).

The English tradition, which had its high point in Queen Anne's Statute of 1709/1710, is founded on the ideas of a specification of property rights to protect the author as an intellectual worker and promote public interest in learning (Huang 185–88). There is a markedly mercantile, investor-protection nature evident in this case (Dias Pereira, *Direitos de Autor e Liberdade de Informação* 65–68). The French tradition, which drew heavily on the liberal ideals of the 1789 Revolution, also borrowed extensively from natural law concepts. Nevertheless, beyond the proprietary and utilitarian values (the latter advanced mainly by Condorcet), it inserted notable personalistic values, mainly observable in the weight that moral rights have in this country – although the concept itself seems to have its roots in Germany, with the writings of Gierke, and in British case-law with Millar v. Taylor (Peeler 430–32).

Alongside these two systems mentioned above, after a phase of privileges granted by both the Kaiser and the Church, the German *Urheberrecht* developed with slower, gradual changes (Trabuco 118). Publishers were one of the leading forces behind this development, and, at first, copyright was a justification for these economic interests. However, the connection of natural right to spiritual property, under the powerful philosophical influence of Hegel and Kant, became even more intense here than in France. The intellectual creator assumed the fundamental reference point, and subsequent changes in the legislation strengthened the author's figure, building a monist vision with inalienable patrimonial rights (Dias Pereira, *Direitos de Autor e Liberdade de Informação* 68–72).

British copyright is a more objective right, focused on the work and its copying, framed as an instrument of economic stimulus and progress in the sciences and arts, exponentiated in the US constitutional perspective. The other two are commonly framed as being in the same tradition as *droit d'auteur*, although *Urheberrecht* would be a more precise paradigm of opposition, because it is much more distant from British norms than Latin legislations (Dias Pereira, *Direitos de Autor e Liberdade de Informação* 240–52). They present a more subjective character and make a strong appeal to the figure and importance of the author as the intellectual creator, emphasising the dignity of creations (Sousa e Silva, "Uma Introdução Ao Direito De Autor Europeu" 1335; Ascensão, "Direito de Autor Sem Autor e Sem Obra" 88).

These differences have been greatly reduced in the last 150 years, accelerating the rhythm of harmonisation in the last half century, almost always going in the direction of an increase of the commercial aspect of copyright. Certainly, an author-centred view of the intellectual creative author was advanced in the initial versions of the Berne Convention, with strong influence by the French

delegation, and Copyright has been written as a human right into instruments such as art. 27, n. 2 of the Universal Declaration of Human Rights; art. 15, n. 1, "c" of the UN International Covenant on Economic, Social and Cultural Rights; art. 17, n. 2 of the EU Charter of Fundamental Rights; and also, they have been interpreted by the European Court of Human Rights as part of art. 1 of the first additional protocol to the European Convention of Human Rights (Vicente, *A Tutela Internacional Da Propriedade Intelectual (Ebook)* 138–46; Torremans 274–81).

However, subsequent international treaties, with strong influence by the USA, and focused on companies in the cultural industries, were promoting a transformation that took the copyright from a civil law framework to a commercial law one (Ascensão, "Direito de Autor Sem Autor e Sem Obra" 95; Dias Pereira, *Direitos de Autor e Liberdade de Informação* 287; Trosow 220–23). The Agreement on Trade-Related Aspects of Intellectual Property Rights and the World Intellectual Property Organization's (WIPO) Internet Treaties serve as good examples in this respect.

Harmonisation within the European Union has followed a similar path. Although initially there was no direct basis for Community legislation to deal with intellectual property issues per se, the needs of the internal market led to strict regulation based on the primacy of the "high level of protection" (Ramalho, "Conceptualising the European Union's Competence in Copyright - What Can the EU Do?"). The attempt to create a European copyright code failed, but this does not mean that the fragmented framework, with the InfoSoc Directive at its heart, has not embraced and approximated a large part of the European copyright rules and diminished to some extent the competence in the member states' area, even if some relevant differences remain (Sousa e Silva, "Uma Introdução Ao Direito De Autor Europeu" 58–64; Dias Pereira, *Direitos de Autor e Liberdade de Informação* 227–30).

Nonetheless, one may observe that the influence of the United States and the United Kingdom seems to have directed the institutional and academic debate towards objectification of copyright law in several moments (Ascensão, "Direito de Autor Sem Autor e Sem Obra"). These changes are fundamental to discussions about autonomously created works, because academic and public policy debate not infrequently kicks off at advanced aspects of copyright legislation, irrespective of basic foundations of their construction over time. It is these points that we attempt to salvage in the following pages.

The Human Authorship Requirement

In its article 15.1, the Berne Convention states that for authorship to be attributed, it is sufficient that one's name appears on the work in the usual manner, even if it is a pseudonym. WIPO's official guide for the interpretation of the Berne Convention, in 15.4, states that this is only a presumption of authorship, leaving member states to make their own rules on the matter (WIPO 93).

The discussion, seeming merely theoretical at first, has a critical and concrete impact on the subject of attribution of ownership. The latter is based on a dogmatic principle of who can genuinely be an author and is closely linked to the "creator's principle" or "principle of human authorship", whose most outstanding example is found in German legislation, specifically in §7 of the UrhG (Dias Pereira, *Direitos de Autor e Liberdade de Informação* 436–39; Sá e Mello 47–48).

Briefly, the idea behind the "principle of human authorship" refers to the intellectual creator as the ontological author, who must be a natural person or a group of natural persons. This category is contrasted with the original holders of rights, who not rarely are legal entities, even though in some legislations both these concepts are clustered in the single legal terminology of "author" (Dias Pereira, *Direitos de Autor e Liberdade de Informação* 436). In certain categories of works, such as computer programs, this original attribution is generally facilitated. However, in Common Law legal systems, mainly through the work-for-hire institute, this quasi-identification between author and owner occurs more visibly (Vicente, *A Tutela Internacional Da Propriedade Intelectual (Ebook)* 46–47; Trabuco 52).

One can note the creator principle in several legislations when, for instance, it is determined that an author is necessarily a natural person or that the intellectual work is a creation of the spirit. In this sense, one can cite, not exhaustively, the laws of France, Germany, Greece, Hungary (see Bridy, "The Evolution of Authorship: Work Made by Code" 401), Spain, Australia, Serbia, Mexico, Brazil and the Andean Community, [2] which includes Bolivia, Colombia, Ecuador and Peru.

[2] See, respectively: Real Decreto Legislativo 1/1996, art. 5, n. 1; Copyright Act de 1968: Section 32, (1) e (4); Закон о ауторском и сродним правима 2004, art. 9 (1); Ley Federal del Derecho de Autor de 1995, art. 12; Lei de Direitos Autorais de 1998, art. 11; Decisión 351 de la Comunidad Andina, art. 3

Evading this principle would require an explicit provision since copyright law, especially in the *droit d'auteur* tradition, is primarily anthropocentric (Michaux 412; Cock Buning 527–33). Deviations from this pattern should be interpreted as exceptional situations, such as original assignments of employee rights to companies.

At the international level, the Berne Convention does not explicitly address the issue, leaving room for different rules and interpretations, but there are indications that human authorship is at the centre of the regime. Sam Ricketson argues strongly for this interpretation, analysing the debates prior to the process of inclusion of the different categories of works in the treaty, repudiating perspectives that focus too much on the commercial value of the works and pointing out that a real battle for the "soul" of copyright already took place in 1992, with the concept of authorship reaching a limit before losing its meaning (Ricketson 33–37).

This conclusion about the existence of a principle of human authorship in the Berne Convention was corroborated by Jane Ginsburg more than 20 years later, explicitly analysing the case of autonomously generated works (Ginsburg, "People Not Machines: Authorship and What It Means in the Berne Convention" 133–35). Other jurists following the same interpretation are José Alberto Vieira (Vieira 133) and Nuno Sousa e Silva, while citing renowned scholars such as Silke von Lewinski and Adolf Dietz (Sousa e Silva, "Ownersh.

Probl. Overlaps Eur. Intellect. Prop." 30). On the other hand, one must acknowledge that this is not a unanimous opinion, and some scholars say that the Berne Convention is neutral on the possibility of non-human authorship, especially within Common Law copyright (Miller 1050–52).

In the European Union, Directive 2004/48/EC repeats the Berne Convention presumption of authorship in its Article 5, extending it to authors of related rights. The Directive on authorship (96/9/EC and 2009/24/EC) differentiates between natural persons as authors and legal entities as possible holders. Directive 2006/115/EC appears to be a little more open, pointing out, generically, that the "principal director" of a cinematographic work will be the author, a guideline repeated in Directives 2006/116/EC and 93/83/EEC. Nevertheless, as foreseen in the Community text and as evidenced in Austrian and German laws, such original attributions should be considered exceptions to the core of the concept of what constitutes an "author." Ana Ramalho indicates that human authorship is the most appropriate conclusion when interpreting EU directives (Ramalho, "Will Robots Rule the (Artistic) World?" 7).

The Court of Justice of the European Union (CJEU) helps to strengthen this understanding. There are some explicit notes, such as the conclusions of Advocate General Verica Trstenjak in Painer (C-145/10, submitted on 12/04/2011) and Advocate General Melchior Wathelet in Case C-453/15 (submitted on 07/09/2016). The Court itself has also implicitly hinted at this requirement in cases such as Infopaq International (Case C-05/08), BSA (C-393/09), Painer (Case C-145/10), Infopaq II (C-302/10) and Football Dataco (Case C-604/10). Indeed, as requirements for copyright protection, there are signs for the need of human authorship in defining the subjective element of originality in the work, and criteria for this determination such as the author's "free and creative choices" and their "touch of personality."

We do not understand copyright mainly as a natural right but as a social construction, even though it is commonly framed as a human right. Copyright seems to be one of the best examples of protection that profoundly depends on legal fictions to exist and have at least a minimal degree of enforcement. This assumption could lead us to the conclusion that the existence of an intellectual work autonomously generated by AI would primarily be a legislative discretionary choice. This is more visible in the author-statutory model of the British legal system, where the boundaries of authorship are more clearly a result of legal provisions, but less so in the European Continental tradition, where the notion of authorship is considered to be derived from a natural creative action (Sá e Mello 60).

This statement is not categorically erroneous. The imputation of authorship is a legal inference, which does not need to correspond to a naturalistic/ontological conception of the author in which the work reflects the spiritual parenthood of the creator. To deny this today would lead us to ignore an extensive framework of the current legal reality worldwide, considering the existence of copyright protection for software, even if their characterisation as literary rather than technical works may still be questioned by some scholars today (Sá e Mello 53–56).

However, even if one does not accept a natural theory foundation for contemporary copyright, it would be a mistake to ignore that the modern fixation of these legal systems (especially in the Civil Law tradition) was largely built around this idea (Ginsburg, "The Concept of Authorship in Comparative Copyright Law" 1066–68). We can see a reflection of this in the aforementioned fact that author's rights are internationally considered to be human rights, thus going beyond ordinary national law (Saiz García 12–14).

This perception has not only theoretical impacts, but also functional and practical ones, as one can see in the balancing of fundamental cultural rights of the different agents involved in copyright proper legal reasoning, which is not restricted to economic parameters (Torremans 287; Gompel 308–09). Promoting an isolated national change in the core of the authorship concept would imply creating an anomalous law, reducing the existing international and regional harmonization, which is, besides other theoretical and practical implications, a serious problem for the transaction costs in transnational exchanges (Baldia 28–31).

Balancing Interests and Fundamental Rights

In copyright systems, we often observe explicit references to protecting cultural values and access to information, which leads us to the balance of interests in this field. The desires of authors must be reconciled with those of consumers, companies in the cultural economy, digital users, and others. Indeed, there is a general principle of freedom of information as the structural pillar of the entire system (Vicente, "O Equilíbrio de Interesses No Direito de Autor" 259–60; Hoeren 25–27), reflected in the distinction between idea and expression, and in institutes such as the public domain, fair use or limitations and exceptions. This balance is necessary to stimulate the cultural environment and even enable technological development in eminently commercial uses (Remédio Marques 219–22). The intricacy of promoting this balance can be perceived in significant differences between national legislations worldwide (Vicente, *A Tutela Internacional Da Propriedade Intelectual (Ebook)* 64–68).

For that same reason, there should be no hierarchy between positive and negative rules of copyright law since they are opposite and complementary sides of the same coin. Limits, exceptions, exhaustion, exclusions and the public domain must be read in this manner, not as something inhibiting or harmful to intellectual rights (Vicente, "O Equilíbrio de Interesses No Direito de Autor" 256–63; Trabuco 698). As free uses are the normal state of works, they are important not only for consumers or users interests but also for the creators themselves and for the creative economy itself, if the potentials are properly explored (Ascensão, "Dispositivos Tecnológicos de Proteção, Direitos de Acesso e Uso Dos Bens" 110 e 121). A good example is how works in the public domain can and are used by small enterprises to deliver or publicise their work (Erickson et al.).

However, as pointed out above, regulators' positions in defence of more flexible intellectual property rights have diminished since the 20th century.

With the increasing economic importance of the creative economy and of Information and Communication Technologies (ICTs) and related goods, the debate became increasingly centred only on the opposition between the various private interests involved. The whole idea of "public interest" marginalised, as if it was merely a small section of those commercial goals of companies and creators (Ascensão, "Direito Intelectual, Exclusivo e Liberdade" 129).

The possibilities and risks of new ICTs, especially the Internet, have led to a markedly intense response from the cultural industry, even promoting measures against large parts of societies, acting as if everyone was a potential "pirate." Traditionally free uses in the physical world became reserved acts in the digital space, new kinds of "works" that were more technical than creative became protected, and radically new categories of rights emerged. Critical scholarship began to draw attention to the adverse effects on creativity, the dysfunctionality of the system, and the widespread disapproval of the very idea of copyright protection (Lessig; Ascensão, "Direito de Autor versus Desenvolvimento Tecnológico?").

The importance of fundamental and personality rights in the European Continental tradition emerges here as an alternative tool to prevent the predominant utilitarian analysis of copyright from being focused on purely economic viewpoints. The balancing of fundamental rights is at the heart of the discussion, whether at the level of internationalized human rights (Torremans 281–89), or at constitutional terms (Dias Pereira, *Direitos de Autor e Liberdade de Informação* 160–61). In contrast to the author's human rights to have their creations protected, there are social rights of information and freedom of expression, which benefit from free use in many contexts, and the public domain in a more general way (Branco 68–75; Goldstein and Hugenholtz 23–24).

This change in copyright premises becomes particularly important when one notes that much of the law research based on different economic analysis types, which have historically been used to justify strong intellectual property rights, now indicates that copyright may not always serve its stated purposes of encouraging creativity and inventiveness. After all, maximalist rights can create competitive harm and unnecessarily increase transaction costs by forcing the internalisation of high expenses (such as searching and verifying the possibility of utilisation) that can, among other effects, make licensing and ascertaining the legitimacy of use too costly. These barriers can appear to the point of making it impossible for secondary authors to do business or be involved in the more extensive creation process (see Branco 59–63; Lemley, "Faith-Based Intellectual Property"; Johnson; de Beer; Boldrin and Levine; Peukert).

The (*droit d'auteur*) Road to the Public Domain

In most academic texts about works generated by artificial intelligence, it is possible to perceive perspectives overly centered in common law premises or utilitarian analyses, disproportionately based on dogmatic *topoi*, such as the idea

that new and stronger intellectual property rights must always lead to better rates of creativity and innovation.

This idea prompts the reader to forget the foundations of copyright in natural law and its anthropocentric core. Disregarding these roots is a mistake which is getting progressively more relevant because, in the face of new empirical research questioning the effectiveness of intellectual property rights, even major theorists favouring utilitarian approaches have increasingly advocated natural theory complementation to provide sufficient justification for intellectual property law (Merges 72).

With this concern in mind, we can look at some consensus delivered, and some questions left open by the European Parliament's Resolution of 20 October, 2020, on intellectual property rights for the development of artificial intelligence technologies (2020/2015(INI)).

Topic 14 of the Resolution is straightforward and easy to understand. The minimum standard of originality, established by the CJEU in Infopaq I (C-5/08) [3], leaves little room for doubt that if the AI is merely used as a tool, there is no genuinely new issue here, and the usual copyright framework applies typically. In other words, traditional rules apply if no human creative contribution can be ascertained, which can be boiled down to a creative choice of input data and minimal steering of the output.

[3] Later confirmed and reinforced in BSA (C-393/09), Painer (C-145/10), Infopaq II (C-302/10) and Footbal Dataco (C-604/10), with *Cofemel* (C-683/17), confirming that this low standard is mandatory in all copyright matters of EU member-states.

Topic 15, about the impossibility of ownership by the machines themselves, is a bit less clear, but also hard to deny, when briefly researching the current state-of-the-art debate around the world. Established academic scholarship, with few notable exceptions (e.g. Pearlman 26–36), and institutional reports about autonomously generated works specifically provide no good reason to go down this path.

Topic 15 follows up with an open recommendation to the Commission, if it is decided that these works should be eligible for protection, "to support a horizontal, evidence-based and technologically neutral approach to common, uniform copyright provisions applicable to AI-generated works in the Union." Nevertheless, the lack of textual precision in this passage should not be read as a nudge to ditch the premises of the *droit d'auteur* tradition, just because they apparently come with fewer analytical tools to provide more easily accepted objective parameters for global standards.

The widely supported thesis of an international standardisation based on adaptations of the work-for-hire institute (Bridy, "Coding Creativity: Copyright and the Artificially Intelligent Author" 26–27; Bridy, "The Evolution of Authorship: Work Made by Code"; Okediji; Yanisky-Ravid), for example, seems to marginalise the challenge of reconciling this institute with many of the current systems of *droit d'auteur* countries (Schönberger 158). The required level of reform in these countries would be noticeably greater, with more leeway for unexpected and undesirable effects.

Although to a lesser degree, the same is true for the proposed universalisation of the British regime (Guadamuz; Boyden; McCutcheon, "Curing the

Authorless Void: Protecting Computer-Generated Works Following Icetv and Phone Directories" 50–78). One of the arguments here is that similar provisions already exist in several countries, such as India, South Africa, Hong Kong, New Zealand and Ireland. However, one can notice that they are all partially or fully common law countries under the influence or part of the Commonwealth. Therefore, it is not something that has already been tested and evaluated in civil law countries or other substantially diverse legal traditions.

The alternative approach to protect these works through copyright per se is to frame them as collective works (Saiz García 24–26), adapting this concept oriented to the protection of markedly entrepreneurial creations, in which the individual contribution is either barely distinguishable or of minor relevance to the final result. However, this option is not theoretically solid considering current copyright systems, since the concept background here is that a company is composed of people. There is a presumption of existence, even if indirectly, of human acts in creating the work or coordinating the work activity (Ramalho, "Will Robots Rule the (Artistic) World? A Proposed Model for the Legal Status of Creations by Artificial Intelligence Systems" 17). This rupture to the existing theoretical framework should be justified on reasonable and convincing grounds.

For this very reason, it is essential to clarify that the public domain alternative should not be understood as a "radical proposal," as was already stated (Samuelson 1224). On the contrary, it is the most restrained proposition, requiring at least some clarification in the law to guide jurisdictional and public agencies. Even common law countries with a long history of low originality requirements can choose this path. It is the case of the Compendium of U.S. Copyright Office Practices, when it expressly determines, mainly in its sections 306 e 313.2, that human authorship is a requirement for protection.

Exclusive rights over autonomously generated works would require radical changes in the law, at least in countries where the principle of human authorship is visible. Since legal reform usually has significant social and economic costs (Van Alstine), we must first verify whether it is necessary or at least sufficiently beneficial.

After all, the truest rationality (rationale?) of copyright is the creation of monopolies to form an artificial scarcity where it would not exist naturally (Lemley, "IP in a World Without Scarcity" 462), which is essentially why only some types of works deserve this kind of protection (Ramalho, "Will Robots Rule the (Artistic) World? A Proposed Model for the Legal Status of Creations by Artificial Intelligence Systems" 18–19). It does not seem fair to assert, concerning autonomously generated works, that the argumentative burden is on those who intend to maintain the law as it is, denying exclusivity due to the inexistence of human authorship (as said by McCutcheon, "The Vanishing Author in Computer-Generated Works: A Critical Analysis of Recent Australian Case Law" 950).

On the contrary, we fully agree with James Boyle when he states that, in the absence of evidence on both sides, the presumption should favour the public

domain and the burden of proof lies with those who wish to create a legal monopoly that can directly or indirectly interfere with free trade/market, freedom of expression and technological development (Boyle 207).

The theorist is, in this point, accompanied by leading Portuguese scholars that constantly remind us that the exclusive right is an exceptional circumstance, and not the normal state of works (Vicente, "O Equilíbrio de Interesses No Direito de Autor" 259–60; Ascensão, "A Questão Do Domínio Público" 23; Dias Pereira, "Fair Use e Direitos de Autor (Entre a Regra e a Exceção)" 469). Even if the Infosoc Directive (recital 9-11) and CJEU judgements such as Phil Collins (C-326/92) and Coditel (C-62/79) point to the need for exclusive rights based on a high level of protection to remunerate creative economy actors, this should be read as a problem resulting from a market failure that needs to be addressed with an equally exceptional legal intervention.

For all the above, we prefer to side with the scholarship that emphasises the legal coherence and the benefits of autonomously generated works being originally part of the public domain. They are mostly part of the continental European tradition, but this group's position is also reinforced by jurists from a common-law background (Azzaria; Cabay; Ramalho, "Will Robots Rule the (Artistic) World? A Proposed Model for the Legal Status of Creations by Artificial Intelligence Systems"; Schönberger; Clifford).

This proposal does not rule out traditional and existing neighbouring rights or *sui generis* based on the argument that the work was created without human interference. These rights are applicable in the same way as they currently are, even to works in the public domain, including in countries of the continental European tradition - such as the performance of a song whose original author died over 70 years ago (AIPPI 3; Drexl et al. 21).

If market failures and the possibility of correcting them through regulatory intervention are detected, the most appropriate way forward seems to be a new neighbouring or sui generis right specifically to protect this type of work, aiming to give some level of direct legal reward to investment in this kind of technology while avoiding an exaggerated disruption of the copyright system rights (Cock Buning 534; Dee 36; Vieira 142–43; Ciani 9–10).

However, we still maintain that the public domain alternative would best reflect the laws in force in these jurisdictions, and there is no need to create new legal schemes for protection. Nowadays, creators have at their disposal several tools not related to copyright to obtain revenue, such as selling software licenses to access and use creative AI online, digital advertising, indirect market recognition and many other possibilities. As an example, monetization of public domain works has long been discovered by YouTube content creators and republishing enterprises [4].

Moreover, because of the threshold of a minimum amount of creativity to characterize human authorship, it would also require a minimum effort from the person willing to be considered the creator of the mostly self-generated work, to achieve this goal. A few creative choices about the database or final object to be produced by the AI already seem to be enough to attribute

[4] See (i) https://amyharrop.com/how-to-profit-from-self-publishing-public-domain-content/; (ii) https://www.nichepursuits.com/do-public-domain-works-provide-a-good-business-opportunity/; or (iii) https://medium.com/@NateHammondDGO/make-money-off-youtube-and-public-domain-videos-edf6bedaba5c. The economic value and ways of profiting from the public domain have also been the subject of some interesting policy reports (e.g. Erickson et al.)

authorship to the person who made those decisions. Some scholars even point out that this means that we will not have any truly independently generated work in the foreseeable future (Hedrick 357–74). Therefore, the argument that the public domain thesis would be a significant obstacle for the industry in this sector is very unconvincing.

If this is not the path chosen by governments, at least it is crucial to ensure that discussions about international proposals do not ignore essential aspects of legal traditions that are so varied throughout the world. Their rules and the philosophy behind them should be taken much more seriously, at least by specifying the reasons why they should be dismissed in copyright public policy proposals.

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