Copyright for AI-generated works: a task for the internal market?

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1. Introduction

Legislative and policymaking initiatives from the EU reveal its ambition to become a pioneer when regulating artificial intelligence (AI).[1] Copyright law finds a special place in this respect. Works generated through complex AI systems, and in particular reliance on machine learning methods have stirred discussions in the fields of art, policymaking and computer science.[2] Voices emerged questioning whether current EU copyright laws should be amended in light of the many AI-generated works that have come about recently.[3] This has prompted an academic debate on copyright law rationales, the human-centred authorship requirement, as well as the notions of creativity and originality, which goes beyond intellectual property (IP) laws unpack the philosophical and psychological connotations of the term 'originality'.[4]

This paper takes a different approach. It positions copyright law within the EU's constitutional limits. In particular, it considers whether the EU legislative competences allow for the expansion of copyright protection to purely AI-generated works. Following the principle of conferral, the Union can legislate only within the limits of the competences conferred upon it by the Member States (MS). There is no specific legal basis tackling copyright, meaning that EU copyright law-making has not been based on copyright-related reasoning, but instead on the goal of establishing an internal market (Article 114 TFEU). To that end, the EU would typically introduce secondary copyright legislation whenever the differences between national laws risk interfering with the free movement of goods and services.[5] Additionally, while

[1] 'Proposal for a Regulation of the European Parliament and of the Council Laying down Harmonised Rules on Artificial Intelligence' (European Commission 2021) COM(2021) 206 final.

[2] Marian Mazzone and Ahmed Elgammal, 'Art, Creativity, and the Potential of Artificial Intelligence' (2019) 8 Arts 26; Maria Iglesias, Sharon Shamuilia and Amanda Anderberga, 'Intellectual Property and Artificial Intelligence - Literature Review' (Joint Research Center, European Commission 2019) EUR 30017 EN; Jonathan P Osha and others, 'Copyright in Artificially Generated Works' (AIPPI 2019); Committee on Legal Affairs, 'Report on Intellectual Property Rights for the Development of Artificial Intelligence Technologies' (European Parliament 2020) A9-0176/2020; David Lehr and Paul Ohm, 'Playing with the Data: What Legal Scholars Should Learn About Machine Learning' (2017) 51 U.C. DAVIS L. REV. 653; Ehud Reiter and Robert Dale, 'Building Applied Natural Language Generation Systems' (1997) 3 Natural Language Engineering 57.

[3] Committee on Legal Affairs (n 2) para 3; Timothy Pinto, 'Robo ART! The Copyright Implications of Artificial Intelligence Generated Art' (2019) 30 Entertainment Law Review 174, 178; Andres Guadamuz, 'Do Androids Dream of Electric Copyright? Comparative Analysis of Originality in AI Generated Works' [2017] IPQ 169, 185; Pratap Devarapalli, 'Machine Learning to Machine Owning: Redefining the Copyright Ownership from the Perspective of Australian, US, UK and EU Law' (2018) 40 EIPR 722, 727.

[4] Among many others, see Ana Ramalho, 'Will Robots Rule the (Artistic) World? A Proposed Model for the Legal Status of Creations by Artificial Intelligence Systems' (2017) 21 Journal of Internet Law 12; Daniel Gervais, 'The Machine As Author' (2020) 105 Iowa Law Review 2053; Jane C Ginsburg and Luke Ali Budiardjo, 'Authors and Machines' (2019) 34 Berkeley Technology Law Journal 343; Martin Senftleben and Laurens Buijtelaar, 'Robot Creativity: An Incentive-Based Neighboring Rights Approach' (2020) 42 EIPR 797; P Bernt Hugenholtz and João Pedro Quintais, 'Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?' (2021) 52 IIC 1190; Martin Senftleben, 'A Tax on Machines for the Purpose of Giving a Bounty to the Dethroned Human Author – Towards an AI Levy for the Substitution of Human Literary and Artistic Works' <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4123309> accessed 28 November 2022.

[5] Directive 93/83/EEC; Directive 96/9/EC; Directive 2001/29/EC; Directive 2006/115/EC; Directive 2006/116/EC; Directive 2001/84/EC; Directive 2004/48/EC; Directive 2009/24/EC; Directive 2011/77/EU; Directive 2012/28/EU; Directive 2014/26/EU; Directive 2017/1564; Directive 2019/790; Regulation 2017/1563; Regulation (EU) 2017/1128.

copyright law is equally about culture, the Union's cultural competences are only coordinative – they cannot be relied on to pass harmonising measures, which is what a potential expansion for purely AI-generated works would seek to do. From a practical perspective, in terms of EU copyright law-making, this renders the culture legal basis borderline useless. On the flipside, the internal market goal's flexible mechanics and has allowed the EU legislator to present numerous copyright measures.

On the AI/copyright front, the discussion has focused on many works which have been generated with the heavy involvement of AI systems. This is what this article calls 'purely AI-generated works'. In EU copyright law, a central requirement for protection is human authorship and specifically, the human's clear stamp of free and creative choices in the final output.[6] In many computational creativity projects in the fields of art,[7] journalism[8] and music,[9] the heavy reliance on AI stretches the causation bond between the human author and the final creative output to a breaking point. To that end, it is not clear whether copyright protection would still subsist in many of these newly emerged works. In light of this and considering the advocates for the expansion of copyright protection to AI-generated works, this paper questions the applicability of Article 114 TFEU to a potential EU legislative endeavour. Put differently, should the internal market goal justify opening EU copyright law to AI-generated works?

This paper argues in the negative. In doing this, it relies on the subsidiarity and proportionality principles, as well as the Better Regulation Agenda that underline the normatively absent Article 114. While subsidiarity may be seen as highly political and potentially ineffective, the proportionality principle clearly indicates that extending copyright protection to purely AI-generated works is not required to achieve a balanced internal market as foreseen by Article 114. This is coupled with the Union's focus on more responsible regulation through its Better Regulation Agenda.[10] In the context of AI-generated works, while the one-day wonders certainly agitated artistic circles, it appears that there is no empirical evidence demonstrating a clear market failure should AI-generated works remain free from copyright protection. On the contrary, the difficult copyright authorship claims conundrum has not discouraged creators from entering the field to the extent that AI-generated art seems to still be a profitable field regardless of whether it is protected with copyright law.

Having introduced the problem here, Section 2 focuses on EU copyright law-making to emphasise how the internal market narrative has taken the lead over cultural concerns. Section 3 discusses the notion of a 'balanced internal market' through the lens of the subsidiary and proportionality principles. Section 4 dives into the IPR specifics to argue that copyright law is not suitable to balance the internal market when it comes to purely AI-generated works. Finally, Section 5 concludes the discussion.

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[6] *Case C-145/10 Eva-Maria Painer v Standard VerlagsGmbH and Others* [2011] CJEU ECLI:EU:C:2011:798 [89]; For a detaield discussion on the human authorship, see Ana Ramalho, *Intellectual Property Protection for AI-Generated Creations Europe, United States, Australia and Japan* (Routledge 2022) 24–33.

[7] Jessica Fjeld and Mason Kortz, 'A Legal Anatomy of AI-Generated Art: Part I' [2017] JOLT Digest <http://jolt.law.harvard.edu/digest/a-legal-anatomy-of-ai-generated-art-part-i> accessed 28 November 2022.

[8] Alina Trapova and Péter Mezei, 'Robojournalism – A Copyright Study on the Use of Artificial Intelligence in the European News Industry' (2022) 71 GRUR International 589.

[9] Oleksandr Bulayenko and others, 'AI Music Outputs: Challenges to the Copyright Legal Framework' (2022).

[10] European Commission, 'Better Regulation for Better Results - An EU Agenda' (European Commission 2015) COM(2015) 215 final.

2. The EU copyright law-making process

Several copyright legislative measures have been enacted at a Union level. These have diligently followed the internal market objective as per Article 114 TFEU and there is nothing to suggest that future legislation will adopt a different logic. Cultural considerations, while present in the Treaties, the recitals of the EU copyright directives, and invoked by the CJEU, have taken a backseat. This section studies the rationale behind such a law-making process.

2.1. The internal market legislative objective taking the lead

The Union can legislate only within the limits of the competences conferred upon it by the MS.[11] This translates into an obligation to have a clear legal basis in the Treaties when the EU adopts legal acts.[12] This stamps the EU action with a badge of legitimacy and is one way of reflecting "the balance of power" between the EU and the MS.[13] In line with the necessity for legal certainty and clarity when adopting a legal measure, the EU should clearly state not only the legal basis but also the concrete objective it intends to achieve with a given measure.[14]

Copyright laws on an EU level follows that same legislative path. That said, explicit reference to copyright law in the Treaties is missing. Until the Treaty of Lisbon, an explicit mention of IP rights was also absent.[15] Hence, harmonisation has not been based on copyright-related reasoning, but instead on the goal of establishing an internal market in the EU. To that end, the EU would typically introduce secondary legislation in the field of copyright whenever the differences between national copyright laws risked interfering with the free movement of goods and services. Thus, as per Article 114 TFEU, the European Parliament and the Council can adopt measures for the "approximation of the provisions in Member States which have as their object the establishment and functioning of the internal market".

What is striking when one is confronted with the wording of Article 114 is the absence of normative content.[16] Authors have termed this as a "functional competence": the provision grants the EU the powers to achieve an objective but it leaves the substantive choice to the legislators.[17] Being so functionally driven, "any national measure" may be subject to harmonisation as long as it leads to better functioning of the internal market; thus, "nothing is placed off the EU's limits".[18] To this end, it has been argued that when adopting measures

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[11] Article 5(2) TEU.

[12] Case C-370/07 *Commission v Council* [2009] CJEU ECLI:EU:C:2009:590 [46]; Case C-325/91 *Commission v France* [1993] CJEU ECLI:EU:C:1993:245 [26].

[13] Peter Lindseth, 'Democratic Legitimacy and the Administrative Character of Supranationalism: The Example of the European Community? Columbia Law Rev 99': (1999) 99 Columbia Law Review 628, 706.

[14] Ana Ramalho, *The Competence of the European Union in Copyright Lawmaking* (Springer International Publishing 2016) 106.

[15] The Treaty of Lisbon introduced what is now Article 118 TFEU, which permits the creation of European IPRs, but different to trade mark and design law, copyright has not followed that path of unitary rights.

[16] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14) 11.

[17] S Weatherill, 'Competence Creep and Competence Control' (2004) 23 Yearbook of European Law 1, 6–7; Sacha Garben, 'Restating the Problem of Competence Creep, Tackling Harmonisation by Stealth and Reinstating the Legislator' in Inge Govaere (ed), *The Division of Competences between the EU and the Member States: Reflections on the Past, the Present and the Future* (Oxford: Hart Publishing 2017) 304; Bruno De Witte, 'Clarifying the Delimitation of Powers: A Proposal with Comments' in European Commission (ed), *Europe 2004: le grand débat: Setting the agenda and outlining options* (2002) 125 <https://ec.europa.eu/governance/whats_new/europe2004_en.pdf> accessed 23 May 2022.

[18] Stephen Weatherill, 'The Limits of Legislative Harmonization Ten Years after Tobacco Advertising: How the Court's Case Law Has Become a "Drafting Guide"' (2011) 12 German Law Journal 827, 831; Robert Schütze, 'Limits to the Union's "Internal Market" Competence(s)' in Loïc Azoulai (ed), *The Question of Competence in the European Union* (Oxford University Press 2014) 231, who argues that the only real limits have been 'the political safeguards of federalism'.

under this functional competence, the legislative powers can "cut horizontally through virtually all policy areas" and can also legislate in fields in which the Union has no, or only, complementary competence, which has sometimes caused significant political controversy.[19]

While undoubtedly Article 114 infuses the law-making process with significant flexibility, it opens the door to the problem of "competence creep" as the EU legislator is vested with a rather broad discretion.[20] The EU can practically legislate as long as there is a "point of connection to the building of an internal market".[21] The competence creep problem-the target of serious criticism in academia- can be considered tantamount to "indirect legislation" as it pertains to the idea that the EU can adopt a legislation in areas in which it is not considered to have been conferred specific legislative competence and hence manipulating the "broad and fuzzy contours" of Article 114, which transforms the important compliance with the principle of conferral into a mere "drafting exercise".[22]

The CJEU has however, sought to define these contours in the *Tobacco Advertising* cases.[23] The dispute concerned the interaction between the EU's supplementary competence in public health (Article 168 TFEU) and its harmonising powers (Article 114 TFEU). The CJEU stressed that a measure validly based on Article 114 must have as its genuine goal the establishment or functioning of the internal market, so a "mere finding of disparities" or an "abstract risk of obstacles to the exercise of fundamental freedoms" is insufficient.[24] The internal market will constitute such a genuine goal if there are obstacles to trade; for instance, if MSs already have diverging laws that impact the functioning of the internal market. Alternatively, Article 114 can be relied on to adopt a measure, the aim of which is to prevent future obstacles to trade resulting from the multifarious development of national laws.[25] Nonetheless, the emergence of such future obstacles must be likely and the measure in question must be designed to prevent them. Importantly, the CJEU stressed that the EU cannot rely on Article 114 when the measure in question "only incidentally harmonises market conditions".[26] The key mechanism adopted by the court when a legislative measure pertains to more than one policy area with different consequences – one permitting the adoption of harmonising measures and another one with only a supporting competence – is the "centre of gravity" test.[27] However, the Court is clear that provided that the main goal of a measure is the functioning of the internal market, the same adopted measure can impact other fields or pursue other aims.[28] This is only reasonable since policy areas are not "watertight compartments".[29] Adopting legislation in one field would inevitably have to address various aspects of human life. Preventing such interaction would paralyse the EU, hinder legitimacy and inevitably lead to "handcuffing" of the EU, which is not in line with the preferences of the electorate.[30]

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[19] Garben (n 17) 304; De Witte (n 17) 125.
[20] Weatherill (n 17) 6; Paul Craig, 'Competence: Clarity, Conferral, Containment and Consideration' (2004) 29 European Law Review 323.
[21] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14) 11.
[22] Weatherill (n 18) 848.
[23] *Case C-376/98 Federal Republic of Germany v European Parliament and Council of the European Union* [2000] CJEU ECLI:EU:C:2000:544 (Tobacco Advertising I); *Case C-380/03 Federal Republic of Germany v European Parliament and Council of the European Union* [2006] CJEU ECLI:EU:C:2006:772 (Tobacco Advertising II).
[24] *Tobacco Advertising I* (n 23) para 84.
[25] ibid 86.
[26] ibid 33.
[27] ibid 54.
[28] ibid 78.
[29] Garben (n 17) 328.
[30] ibid 329.

However, this legislative approach warrants cautiousness. When seeking to define the limits of Article 114, the CJEU places excessive significance on "slippery adjectives and adverbs".[31] In particular, a measure's objective must be to *genuinely* improve the conditions for the establishment and functioning of the internal market; an *abstract* risk of disturbing the fundamental freedoms or distorting competition is not enough to trigger Article 114; differences between MS laws must have a *direct* effect on the functioning of the internal market or cause *appreciable* distortions to competition; preventive harmonisation is permitted only on the condition that obstacles to trade are *likely*.[32] These standards are extremely vague and it is unclear how to properly assess them in practice. While bearing an "immense constitutional weight", they remain "a set of phrases which merely serve as a "drafting guide" which readily enables the legislative institutions to comply with the principle of conferral."[33]

In this landscape, Article 114 has helped fine-tune EU copyright legislation, when it pertains to the internal market. At the same time, Article 114 has allowed wide array of interests to ride on the coattails of the internal market goal. Lobbying organisations look after the specific interests of various stakeholders such as the different creative industries, consumers, users, etc. In particular, the copyright policy debate has been underlined by strong industry lobbying voices, which have regularly held meetings with the Commission during legislative processes.[34] The functional competence of Article 114 presents lobbying associations of the creative industries with a handy opportunity to further argue for the expansion of IPRs. Normally, there would be nothing wrong with that, provided that the lobby's arguments are sufficiently backed up by independent research and not just driven by their own industry concerns. However, this is not always the case.[35] Given the internal market rationale, the whole process is often more skewed towards specific business interests. In particular, these groups have regularly stipulated that in the absence of IP protection as far as a specific subject matter is concerned, their industry would suffer disproportionately – intangible assets would be underproduced. This was precisely the case with respect to the *sui generis* database regime brought in by the Database Directive.[36] One of its objectives was to stimulate investment in the database industry;[37] or in the words of the CJEU, obstacles to trade in the database industry were seen as "likely" and the new right promised to "genuinely" improve the conditions for the establishment and functioning of the internal market. The right was severely criticised for its potential anticompetitive effects on the information market since it confers a monopoly in collections of facts and other non-copyrightable items.[38] In 2018, the Directive's effectiveness, efficiency and relevance were assessed.[39] The evaluation report, based on a thorough external

[31] Weatherill (n 18) 832–833.
[32] ibid 832.
[33] ibid 833.
[34] re:publica, 'Re:Publica 2019 – Martin Kretschmer: European Copyright Reform: Is It Possible?' (*YouTube*, 7 May 2019) <https://www.youtube.com/watch?v=ZyujNlpxu9k> accessed 18 May 2022; 'Copyright Directive: How Competing Big Business Lobbies Drowned out Critical Voices' (*Corporate Europe Observatory*, 10 December 2018) <https://corporateeurope.org/en/2018/12/copyright-directive-how-competing-big-business-lobbies-drowned-out-critical-voices#footnoteref3_bpiolyx> accessed 18 May 2022.
[35] 'General Opinion on the EU Copyright Reform Package' (European Copyright Society 2017) 5 <https://europeancopyrightsocietydotorg.files.wordpress.com/2015/12/ecs-opinion-on-eu-copyright-reform-def.pdf> accessed 18 May 2022.
[36] Ibid art 7.
[37] Directive 96/9/EC, Recitals 39 and 40.
[38] Bernt P Hugenholtz, 'Abuse of Database Right Sole-Source Information Banks under the EU Database Directive' in Francois Leveque and Howard A Shelanski (eds), *Antitrust, patents and copyright: EU and US perspectives* (Edward Elgar Publishing 2005) 203.
[39] European Commission, 'Commission Staff Working Paper - Executive Summary of the Evaluation of Directive 96/9/EC on the Legal Protection of Databases' (2018) SWD(2018) 147 final.

study and various public consultation activities,[40] concluded that "the *sui generis* right continues to have no proven impact on the overall production of databases in Europe, nor on the competitiveness of the EU database industry."[41] Hence, the EU database market is characterised by a certain level of stagnation.[42]

Turning to the field of IP and AI, it is possible to draw a parallel to this competitiveness narrative. In 2020 during a plenary session, the European Parliament voted favourably a report on IPRs for the development of AI technologies.[43] The report emphasises the aim of making the Union "the world leader in AI" by stressing the importance of efforts to ensure its competitiveness and to promote regulation in the field.[44] The Parliament advocates for "a fully harmonised Union regulatory framework in the field of AI" which is justified by the desire and potential to turn the EU into "a legislative benchmark at international level".[45] This demonstrates that from the Parliament's perspective, encouraging investment in the fields that touch upon the AI/IP intersection is tightly linked to the need for a harmonising legislation, one that only Article 114 TFEU can ensure in the field of copyright law.

In 2016, Ana Ramalho studied the competence of the EU in copyright law-making.[46] Employing a content analysis technique and studying the various directives, explanatory memoranda in the initial proposals and the amended proposals, she identifies patterns of the recurrent goals of legislative activity.[47] Interestingly, she establishes that there are 88 references to the content industries in total, compared to the 49 references to the internal market-related goals and the 25 to fostering culture.[48] This shows that the internal market and the content industries considerations have firmly taken the lead in EU copyright law-making.[49]

Generally, the internal market goal is not completely inappropriate for copyright law purposes. Differences in national copyright regimes can potentially hinder cross border trade in the sense that goods cannot move freely across the MS. This can be the case, for instance, if one copyright system does not grant protection to certain works, but another does.[50] An additional problem requiring action with the internal market rationale in mind, arises when MSs, threatened by a disruptive phenomenon, such as the information society, technology and peer2peer file-sharing platforms, legislate on a national level. At this stage, in an attempt to prevent distortions of the internal market, the EU legislator has sometimes resorted to "preventive harmonisation".[51] For example, the protection of technological measures and

[40] JIIP and others, 'Study in Support of the Evaluation of Directive 96/9/EC on the Legal Protection of Databases' (European Commission 2018) SMART number 2017/0084.
[41] European Commission, 'Commission Staff Working Paper - Executive Summary of the Evaluation of Directive 96/9/EC on the Legal Protection of Databases' (n 39) 1.
[42] JIIP and others (n 40), Annex 6: Economic Analysis.
[43] Committee on Legal Affairs (n 2).
[44] ibid E.
[45] ibid F.
[46] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14).
[47] ibid 26.
[48] ibid 54.
[49] ibid 18.
[50] See, among others, Council Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property, recitals 1 to 6; Case C-245/00 *SENA* v *NNOS* [2003] ECLI:EU:C:2003:68, [4]; Case C-200/96 *Metronome Musik GmbH* v *Music Point Hokamp GmbH* [1998] ECLI:EU:C:1998:172, [22]; In general, see also *Case C-5/11 Titus Alexander Jochen Donner* [2012] CJEU ECLI:EU:C:2012:370.
[51] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14) 35.

digital rights management were not regulated on a national level up until the adoption of the InfoSoc Directive.[52]

The functional competence of Article 114, the main legal basis for copyright legislation, has presented the EU legislature with a wide stage on which act, which could be instrumentalised in the context of AI. Admittedly, many aspects of copyright law are tightly linked to the idea of free movement of goods, persons, services and capital. However, copyright is also deeply intertwined with many other fields, such as culture.

2.2. ‘Fostering culture’ – are we all on the same page?

Cultural concerns emerged very early on in the EU discussions on copyright. The first ever reference to a legislative action in copyright law focused on the importance of protecting cultural heritage and can be traced back to 1974.[53] A unanimously approved European Parliament Resolution encouraged the Commission to take action in several cultural fields, and in particular, asked the Commission to propose measures “to approximate the national laws on the protection of cultural heritage, royalties and other related intellectual property-rights”.[54] This emphasises the Parliament’s desire to push for a legislative instrument of a harmonising nature and not just coordinate the policies of the MS.

Nonetheless, the Title on culture appeared with the Treaty of Maastricht in 1992 and in a very limited form – the EU could only encourage cooperation between the MS and if necessary, support and supplement their actions.[55] The common market objective had already been present since the Treaty of Rome, so the EU had a long-standing competence to adopt measures to approximate the laws of the MS in that regard. Therefore, the emphasis on culture, while underlying the discourse of the legislative history and recurring in the various copyright law directives,[56] intertwined with the internal market goal very early on, which has now clearly taken the lead in the EU directives on copyright law.

Nowadays, the EU has the competence to support, coordinate or supplement the action of the MS as far as culture is concerned. In that vein, Article 167(1) TFEU underlines that “the Union shall contribute to the flowering of the cultures of the Member States, while respecting their national and regional diversity and at the same time bringing the common cultural heritage to the fore”.[57] However, Article 167(4) TFEU stresses that the EU must take cultural aspects into account in its actions under other provisions of the Treaties, in particular in order to respect and promote the diversity of its cultures. Interestingly, this attaches a certain horizontal dimension to the cultural concerns and over time respecting and promoting cultural diversity has become a transversal concern underlying all EU actions.[58] This provision is explicitly

[52] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society Official Journal L 167, recitals (47) and (56).

[53] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14) 14; ‘Resolution of the European Parliament on the Protection of Europe’s Cultural Heritage’ (1974) OJ C 62.

[54] ‘Resolution of the European Parliament on the Protection of Europe’s Cultural Heritage’ (n 53) 6.

[55] Art 167(2) TFEU.

[56] InfoSoc Directive, recital 11, 12 and 22; Most recently, refer to the CDSM Directive, recital 2.

[58] Evangelia Psychogiopoulou, ‘The Cultural Mainstreaming Clause of Article 151(4) EC: Protection and Promotion of Cultural Diversity or Hidden Cultural Agenda’ (2006) 12 European Law Journal 575, 576.

[58] Evangelia Psychogiopoulou, ‘The Cultural Mainstreaming Clause of Article 151(4) EC: Protection and Promotion of Cultural Diversity or Hidden Cultural Agenda’ (2006) 12 European Law Journal 575, 576.

referred to in the most recent directive in the field of copyright law (the CDSM Directive).[59] Consequently, the respect for cultural diversity appears in various EU provisions that are not necessarily within the EU 'cultural policy' strictly speaking.[60]

Furthermore, Article 167(4) includes the general term 'cultural aspects'. Absent a positive definition in the Treaties, the term is open to diverging interpretations[61] and could be understood both in a narrow sense and in a broad sense.[62] Understood broadly, the term refers to any type of cultural aspect that has a link to culture – for instance, the optional copyright exception from the reproduction right of reporting current economic, political or religious topics as per Article 5(2)(c) of the InfoSoc Directive, or the mandatory exception for the use of works and other subject matter in digital and cross-border teaching activities pursuant to Article 5 of the CDSM Directive. If understood narrowly, the concept would cover only those provisions that explicitly refer to culture, such as the mandatory text and data mining exception for cultural heritage institutions as per Article 3 of the CDSM Directive. In light of the tone of Article 167(4), ie the Union "*shall take*" cultural aspects into account, it can be argued that the phrase must be understood in a broad sense. Therefore, the obligation would be not just for the EU legislator, but would pertain also to the CJEU.[63] This, however, prompts questions as to whether the CJEU can annul an EU act if it finds that cultural aspects were not sufficiently taken into account. Nonetheless, the way in which the provision has been drafted indicates that the EU should consider culture when acting in other policy areas, but the actual outcome of the legislative act is not defined. Put differently, "it is a matter of assessment and evaluation, not of prescribed results to obtain".[64]

From a copyright perspective, clear problems emerge from this framework. It has been suggested that whether or not certain cultural interests will be taken into account hinges more on the "ability of states [to] form voting alliances or broker deals than a principled evaluation of the interest's cultural value".[65] In copyright law, this is particularly relevant in regard to the InfoSoc Directive, which has arguably "sought in the abstract to create a common level playing field for *all* actors in the markets for cultural and entertainment works", but in reality "the main beneficiaries of the harmonised rules were media conglomerates and major content producers who could concretely engage in cross-border trade of their internationally appealing productions".[66] This was precisely due to the fact that the Directive provided uniformly defined exclusive rights and very limited harmonisation of copyright exceptions and limitations. Such a setting benefitted only a limited number of cultural industries – book and music publishers, record and film producers, broadcasters and the large collecting societies.[67] Thus, it did not fully benefit authors and artists, whose cultural concerns are the essence of copyright law.

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[59] Directive 2019/790, recital 2.

[60] Evangelia Psychogiopoulou, 'Cultural Rights, Cultural Diversity and the EU's Copyright Regime: The Battlefield of Exceptions and Limitations to Protected Content' in Oreste Pollicino, Giovanni Maria Riccio and Marco Bassini (eds), *Copyright and fundamental rights in the digital age* (Edward Elgar Publishing 2020) 134–152.

[61] For a further discussion on the conception of culture in EU law see Rachael Craufurd Smith, 'The Evolution of Cultural Policy in the European Union' in Paul Craig and Gráinne de Búrca (eds), *The Evolution of EU Law* (Oxford University Press 2011) 872–875.

[62] Psychogiopoulou (n 60) 126–127.

[63] Psychogiopoulou (n 58) 585.

[64] ibid.

[65] Craufurd Smith (n 61) 885.

[66] Giuseppe Mazziotti, 'Cultural Diversity and the EU Copyright Policy and Regulation' in Evangelia Psychogiopoulou (ed), *Cultural Governance and the European Union: Protecting and Promoting Cultural Diversity in Europe* (Palgrave Macmillan UK 2015) 94.

[67] ibid.

Admittedly, copyright law is a difficult field that is rich on cultural concerns but that is also highly entangled with internal market goals. Striving to remove obstacles in the free movement of goods between MS, the copyright directives have generally promoted cultural creation by ensuring appropriate rewards for authors. Therefore, as long as the regulated copyright aspect can be geared towards an internal market goal, then there will always be a justification to harmonise the laws of the MS and fill the functional competence of Article 114 with normative content.

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An additional consideration is that the umbrella goal of fostering culture gains a different flavour when seen from each stakeholder's perspectives. It has been said that generally when the legislative provisions emphasise the safeguarding of cultural diversity, two dimensions of the discourse are included – nurturing cultural creation, but also fostering the distribution of cultural output.[68] Indeed, the EU legislator has sought to protect the interests of different parties all engaged in one way or another with the notion of "flowering of the cultures" – authors, performers, content-disseminating bodies and users of copyright material.[69] Perhaps for that precise reason, one may be left with the impression that even though culture is somehow always present in the directives' recitals, it is nonetheless not pursued in a logically sound manner. Rather, it follows a chaotic and heterogeneous approach. Culture, to that end, is yet another flexible concept in EU copyright law that is easily applied by different lenses and standpoints. Many recognise themselves in the discourse on fostering culture. In other words, authors will argue, most logically, that being the "original source of creative outcome or activity"[70] grants them with exclusive rights which fosters culture as they are able to produce creative content by benefiting from IP protection. On the other hand, users of protected works may claim that they should be permitted to reuse freely copyright protected content in a various ways in order to further produce creative output. Content-disseminators and platforms in their own way could stress that they facilitate access to cultural works, so they should be able to benefit from certain liability exceptions. These are just some examples of the many possible claims. All standpoints, while falling under the general umbrella of "fostering culture", derive from clashing concerns and have regularly proved particularly difficult to reconcile. This is also pointed out in Recital 22 of the InfoSoc Directive, which states that the objective of proper support for the dissemination of culture must not be achieved by sacrificing the strict protection of rights. This all sounds good in theory, but it is very difficult to achieve in practice.

All of this leaves copyright cultural concerns in a very difficult and uncertain situation since the EU's cultural competences are only coordinating, meaning that the Union is prohibited from adopting harmonising measures, but can only resort to passing supplementing measures. Besides, generally the EU legislative measures have sought to promote cultural creation from the perspective of those cultural industries that produce internationally appealing content, ie intermediaries and media corporations. The interests of individual rightholders have been directly addressed in only a few very special limited cases,[71] which is not sufficient to maintain a fair balance between all interested stakeholders. Naturally, the internal market provision has been the preferred legal basis when passing legislation in the field of copyright law. Its flexibility can be 'manipulated' in order to fit in the legislative agenda interests. Such

[68] Psychogiopoulou (n 60) 125.
[69] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14) 36–39.
[70] ibid 40.
[71] Mazziotti (n 66) 95–100.

interests may not necessarily be copyright ones, but instead reflect the content industries concerns and are inevitably tied to boosting investment. This law-making path becomes very attractive and potentially dangerous in the context of EU's aspirations to become the AI regulatory superpower globally.

3. Safeguarding the balanced internal market in the era of AI-generated works

Having established that when passing legislation on copyright law, the EU's legal basis has been the goal of establishing and maintaining the functioning of the internal market as per Article 114, this section evaluates how a potential copyright protection for AI-generated works would (not) fit with the internal market goal from an EU legislative perspective.

3.1. The "balanced" internal market

As was emphasised above, a broad understanding of the internal market goal has been promoted, meaning that almost all differences between MS' legislation could be subject to harmonisation due to the risk they may create obstacles to free movement.[72] In that sense, it may seems like the internal market will be truly "complete" only when all disparities in the laws of the Member States are removed.[73] However, complete homogeneity of rules has not been achieved in many policy fields, including copyright law. Perhaps such absolute harmonisation was not always a desired end goal of the EU legislator. It would not genuinely guarantee a level-playing field for all players in all MS in a specific market. There are large discrepancies between the business conditions in the different EU MS – their laws, but also available funding in various sectors, infrastructure costs, qualified human resources, business culture, etc. The EU legislature must take into account the overall competitive environment in each MS and assess whether there are indeed any genuine obstacles to free movement for the internal market.[74] Rushing to complete harmonisation almost blindly without considering these side effects could lead to serious regulatory costs, foreclosing markets and burdening policy fields with unjustified bureaucracy hurdles.

The alternative to full harmonisation is partial. However, harmonising just some legal aspects is often equally problematic. It can be perceived as piecemeal and incoherent. The critics of this approach argue that partial harmonisation appears more like an "authorisation to respond to ad hoc political lobbying than a pathway to a better market".[75] This is precisely where EU copyright law can be positioned. No legal instrument has managed to fully harmonise copyright law. Yet, there are many directives on copyright law seeking to eliminate obstacles to free movement of various types and distortions of competition in a wide range of rather specific contexts – software, databases, photographs, orphan works, just to name a few. What has often pushed the legislative agenda are the strong voices of the industry lobby.

Against this background, the crucial issue behind the internal market, as formulated by Gareth Davies, questions the *kind* of market that the law – in this case, copyright law – imagines.[76] To answer this, a better understanding of the internal market goal is necessary –

[72] Gareth Davies, 'Subsidiarity, the Wrong Idea, in the Wrong Place, at the Wrong Time' (2006) 43 Common Market Law Review 63, 63.
[73] Gareth Davies, 'The Competence to Create an Internal Market: Conceptual Poverty and Unbalanced Interests' in Sacha Garben and Inge Govaere (eds), *The Division of Competences between the EU and the Member States : Reflections on the Past, the Present and the Future* (Hart Publishing 2017) 78.
[74] ibid 79.
[75] ibid.
[76] ibid 77.

one, that is aware of the above shortcomings and tries to acknowledge and remedy them. The optimal level of EU regulation is not uniformity at all cost and maximum harmonisation;[77] neither is it a piecemeal harmonisation only discretionarily targeting certain specific aspects. Instead, what EU legislation should strive towards is a careful balance between harmonisation and diversity,[78] as well as between all parties' interests. Gareth Davies has convincingly argued that this balance should not be carried out "just in the name of diversity as such and non-economic interests"; instead, the balance is in the name of the market itself.[79] He maintains that the best, most complete, market is "the one in which social, cultural, economic and other conditions, encourage economic actors to look easily and comfortably across borders".[80] This understanding of the internal market is particularly relevant for the European Digital Single Market, where copyright plays a pivotal role and where looking across borders became possible with just a few clicks.[81]

3.2. Better regulation, subsidiarity and proportionality

To implement this balanced approach when EU laws for the internal market are made, the legislator uses a set of tools. First, the EU Commission's Better Regulation Agenda underlines the importance of careful impact assessments before any EU level legislation is proposed.[82] The TFEU further stresses that the Commission must consult the public and the relevant stakeholders widely prior to proposing any legislation.[83] This is particularly important in technological fields such as AI. Additionally, since the internal market is a shared competence, the principles of subsidiarity and proportionality would inevitably paint the limits of EU's action.

3.2.1. Better Regulation

The EU has committed itself to designing policies and laws with a greater level of transparency and evidence and that are backed up with the views of citizens and stakeholders.[84] These commendable commitments ensure that EU law-making avoids bureaucracy short circuits. The Better Regulation Agenda acknowledges that, naturally, politicians tend to focus on new initiatives. Nonetheless, the EU is "judged" not just on its new political initiatives, but on the benefit and the burden produced by existing EU legislation.[85]

The central argument of proponents of copyright protection for AI-generated works suggests that absent copyright protection for such works, creativity would be stifled and various industries where purely AI-generated works are abundant will suffer underproduction. AI processes will be able to produce a large amount of works extremely quickly. Faced with the choice between using an AI-generated work, which according to the status quo of EU copyright law today, is likely to be free from copyright protection,[86] and a human-authored work, the

[77] ibid 80.
[78] ibid.
[79] ibid.
[80] ibid.
[81] European Commission, 'A Digital Single Market Strategy for Europe' (2015) COM(2015) 192 final 2.
[82] European Commission, 'Better Regulation for Better Results - An EU Agenda' (n 10).
[83] Art 2, Protocol (No 2), TFEU.
[84] European Commission, 'Better Regulation for Better Results - An EU Agenda' (n 10) 5.
[85] ibid 10.
[86] Ginsburg and Budiardjo (n 4).

permission of which a user needs to secure, some have suggested that users will prefer the former.[87] Therefore, such AI-generated works are said to compete directly with human-authored works and thus might be capable of disturbing the market for low creativity works, which is where apparently a large number of artists nowadays make a living. Martin Senftleben even goes one step further by proposing a mandatory AI system "levy" to be paid by users of AI systems in the field of literary and artistic production. [88] The presumption is that such systems will reach a certain degree of refinement, which would inevitably substitute human creations, so making their use more expensive and ensuring a constant stream of revenue could foster human creativity. However, this suggestion stands in stark contrast to the EU's ambition to become a global leader in AI. Regulating AI-generated output by introducing a levy could arguably discourage industries from entering the business of AI in the first place.

This paper argues that, at this stage of economic and socio-cultural research, the assumption maintained by the supporters of positive legislation (including some academics, but also the Parliament)[89] is borderline speculation. It is highly questionable whether regulating an emerging digital technology such as the one behind AI-driven computational creativity is desirable in the first place. Despite the vast and constantly growing literature on the intersection between copyright and AI, not a single EU impact assessment has been carried out to evaluate whether European copyright law requires harmonisation at an EU level with regard to machine learning and computational creativity.[90] On the contrary, the few public reports suggest that based on the available evidence, there is no underproduction of AI music outputs despite the lack of legal certainty as to whether copyright subsists or not.[91] The Better Regulation Agenda is clear – should the Commission decide to take action in the absence of an adequate supporting impact assessment, including qualitative and quantitative data, it will be required to explain publicly why.[92] Any comprehensive assessment of a potential market failure must consider several crucial socio-economic issues: the nature and scale of the problem; all stakeholders views; whether the EU should be involved in the first place; the objectives of any such involvement; the main policy options for reaching these objectives, including effectiveness and efficiency; and most importantly in the case of AI/copyright, the likely economic and social impact of those options. The 2020 European Parliament report stresses the need for legislation to be future-proofed and "followed up on through thorough impact assessments".[93] While this is commendable, this should be the first step towards any potential regulation, not a follow up measure. Evaluation reports of existing legislation are equally important, but carefully preparing legislation in the first place is imperative. Furthermore, the Parliament suggests that a regulation rather than a directive fully harmonising the laws of MS in respect of AI and IP is the most appropriate legislative tool in order to avoid fragmentation of the European Digital Single Market.[94] This rush to regulate seems rather premature, especially considering the MS' constant struggle to agree on directives in the field of copyright law.[95] Naturally, passing a regulation that leaves no leeway to the national legislators to implement the obligations in the way they see fit seems to be an unattainable goal.

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[87] Anne Lauber-Rönsberg and Sven Hetmank, 'The Concept of Authorship and Inventorship under Pressure: Does Artificial Intelligence Shift Paradigms?' (2019) 14 Journal of Intellectual Property Law & Practice 570, 578.

[88] Senftleben (n 4) 2.

[89] Committee on Legal Affairs (n 2).

[90] Péter Mezei, 'From Leonardo to the Next Rembrandt – The Need for AI-Pessimism in the Age of Algorithms' [2020] UFITA 390, 393.

[91] Bulayenko and others (n 9) 81.

[92] European Commission, 'Better Regulation for Better Results - An EU Agenda' (n 10) 7.

[93] Committee on Legal Affairs (n 2) para F.

[94] ibid 3.

[95] Directive 2019/790 is the most recent example. The Commission proposed a text in September 2016 and the Directive was eventually adopted in April 2019 and was subject to many amendments in the Council.

Besides, in case of doubt as to whether to legislate, an impact assessment should not be considered a panacea that magically dispels concerns about the "competence creep". Such evidence-based studies must not take into account copyright theories only in the abstract. They must carefully consider the impact of protecting AI-generated works as an internal market objective, since it appears that this is the driving legislative engine of EU copyright law. There must be a genuine obstacle to free movement (or an imminent risk of the emergence of such an obstacle) that would require an EU-level action. One such obstacle might be if one MS starts legislating individually in this respect. So far, none of the MS has proposed or adopted legislation in that direction. The copyright laws of Ireland and the UK (the latter being now a former MS, but still an important European market) include certain old provisions targeting computer-generated works.[96] While a detailed analysis of these provisions lies beyond the scope of this paper, it is clear that these are not well suited to the AI processes of modern computational creativity techniques. According to these provisions, copyright authorship over computer-generated works vests with the person by whom the arrangements necessary for the creation of the work are undertaken. Machine learning techniques, where complex deep neural networking as well as diffusion text-to-image models are deployed, bring to the forefront an array of potential 'arrangers' with potentially conflicting and competing interests.[97] In the past, computer-generated works presented a "binary paradigm" solution to copyright authorship: either the user, a human author, uses the computer (or any other mechanic device) merely as a tool to produce a creative work or the computer (or any other mechanic device) generates output as programmed by the programmers in a predictable manner *a priori*.[98] In other words, sometimes the programmer's creativity would be directly embedded in the code, which was responsible for the final output. Other times, the user of the program would play the greater role in shaping the output of the software into a commercially viable form by providing relatively elaborate instructions to the machine and/or substantially modifying the raw output in order to make it a profitable asset.[99] Modern machine learning no longer fit the binary paradigm from a technological perspective. Furthermore, from a copyright law perspective, these provisions are erroneously conceived in that they state that in order for a work to qualify for copyright protection as a computer-generated work it must have no human author (as per the UK provisions), or, the author is not an individual (as per the Irish provisions). Such an exclusion of the human author is not in line with authorship and copyright theories. A work is only original in the copyright sense, if it is the *author's* own intellectual creation.[100] An eventual absence of an individual human author does not trigger a copyright claim. Hence, exporting the UK and Irish provisions to the EU level is not sensible since these do not provide the necessary legal certainty for very complicated computational creativity processes. Better regulation, says the Commission, is not a "bureaucratic exercise"[101] – legislative initiatives must truly make sense and cater for the AI computational reality.

Moreover, policies should not be imposed, but "prepared inclusively", listening to the views of those affected by the legislation.[102] This pertains to all stakeholders, not only to those with the loudest lobby voice in Brussels. In the words of the Commission, "better regulation is

[96] Copyright Designs and Patents Act 1988, section 9(3) (UK); Copyright and Related Rights Act 2000, section 2 (Ireland).
[97] Pinto (n 3) 177.
[98] Gervais (n 4) 2088.
[99] Pamela Samuelson, 'Allocating Ownership Rights in Computer-Generated Works' (1985) 47 University of Pittsburgh Law Review 1185, 1203.
[100] *Case C-5/08 Infopaq International A/S v Danske Dagblades Forening* [2009] [35]; *Painer* (n 6) para 89.
[101] European Commission, 'Better Regulation for Better Results - An EU Agenda' (n 10) 4.
[102] ibid.

not about favouring certain policies or objectives over others."[103] While copyright is sometimes difficult to grasp, studies have shown that, if provided with sufficient information and time, the public has a strong opinion on copyright law that is worth sharing with policymakers.[104] Copyright law is a public issue and as such, it requires the input of the public. Such a consultation recently took place in the UK, but no such efforts have been made on an EU level.[105]

In sum, the debate on a harmonised EU copyright authorship law for AI-generated works, where safeguarding the balanced internal market is essential, cannot entertain a one-sided assessment. If so, that would most likely be the story told by the industries engaged in computational creativity, software development and data curation. These players are unsurprisingly rather keen on a copyright protection of AI-generated works as they see themselves as one of the potential copyright authors in this deeply entangled net of authorship claims. Nevertheless, the public voice, as well as the scientific evidence justifying a legislative initiative should have an equal say in this debate.

3.2.2. Subsidiary and proportionality

Since the internal market is a shared competence, both the Union and the MS may legislate and adopt legally binding acts.[106] The limits of the Union competences in that respect are governed by the principles of subsidiarity and proportionality.[107]

The central idea behind subsidiarity is that in areas which do not fall within the Union's exclusive competence (so, the internal market and, hence, copyright law), the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the MS, but can rather, by reason of the scale or effects of the proposed action, be better achieved at a Union level.[108] The principle entails two cumulative conditions: (i) the objectives of the proposed action cannot be sufficiently achieved at a MS level, the so-called "sufficient attainment test"; and (ii) they can be better achieved at an EU level, or the "better attainment test". Essentially, an EU intervention should produce an efficiency gain above the minimum level and its benefit must clearly outweigh that of a MS action.[109] The principle is further motivated by the concerns of over-centralisation, should the legislative powers remain solely with the EU bodies. There is value for the internal market in maintaining certain diverse aspects of the law. Such diversity among the MS is reflective of their culture of law-making, language and copyright traditions. It is indeed a vital element in a well-functioning (digital) single market that the EU has always foreseen.

No legislative measure escapes the scrutiny of subsidiarity. However, the principle bears a strong political connotation and it is unlikely that it would pose any significant legal

[103] ibid 6.
[104] 'CREATe Online Public Lecture "Reflecting on the Public Voice in Copyright Consultations" - Lee Edwards and Giles Moss' (*YouTube*, 25 November 2020) <https://www.youtube.com/watch?v=BVuWX8NMtq4&ab_channel=UniGla> accessed 23 May 2022.
[105] UKIPO, 'Artificial Intelligence and IP: Copyright and Patents' (*GOV.UK*, 2022) <https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents> accessed 18 May 2022.
[106] Art 2(2) TFEU.
[107] Art 5(1) TEU.
[108] Art 5(3) TEU.
[109] NW Barber, 'The Limited Modesty of Subsidiarity' (2005) 11 European Law Journal 308, 311–312.

hurdles should legislation on AI-generated output be proposed.[110] However, in light of the fact that copyright is a highly sensitive issue, it cannot be entirely ruled out that some MS may be dissatisfied with yet another Union-level harmonising measure in the field of copyright law and may try to argue an infringement of the subsidiarity principle. Through the so-called "yellow card" procedure, if a certain number of national Parliaments contest the contents of a proposed measure, the institutions are obliged to review it and justify its final decision.[111] As mentioned, harmonisation (either full or partial) of a policy area is not the panacea to make an industry more competitive. The Commission would have to show the existence or the imminent danger of a clear obstacle to the internal market that would be remedied with that proposed Union level measure. A comprehensive overview of the field must be considered – incentivising the computational creativity industry by granting rightholders one more exclusive IPR through a Union level measure may not be welcome. When dissecting the processes behind computational creativity projects of purely AI-generated works, even though copyright may not always subsist in the final 'creative' output due to the absence of a human author, there are several stages at which copyright and other related rights protection may arise. This protection derives from EU-level instruments and includes, but is not limited to, the collection and curation of training material (potentially protected as an original database[112] or a *sui generis* database right[113]), the software used in the machine learning training process (potentially subject to copyright protection[114]), the creative editing and post-production work humans carry out at the redaction stage following the operation of an AI system (potentially subject to copyright[115]). In other words, programmers and users of AI reap benefits from their work and get compensated throughout the computational process at various stages. Furthermore, since the copyright regimes of the different MSs still vary significantly, it is likely that in addition to these Union level IPRs, other national laws add another layer of protection, such as contract law, unfair competition law, passing off and copyright for computer-generated works protection. Therefore, national Parliaments may consider their national systems perfectly fit to address any potential market failures with respect to AI-generated output and copyright. In other words, a MS action achieves the objective of maintaining a healthy and well-functioning internal market for AI-generated output sufficiently well; thus, Union level action is not warranted in light of the subsidiarity principle. However, considering the legislative history behind previous directives, it is not very likely that subsidiarity would pose serious hurdles.

What might be more problematic is satisfying the proportionality principle, which requires that whatever measure is proposed at an EU level must be proportionate to the interest pursued.[116] In other words, let us not kill a fly with an elephant gun. The crucial question is whether there is a less restrictive way to achieve the aim sought by the legislative measure. The principle assesses the intensity of the Union action.[117] Generally, it entails three (sometimes four)[118] steps: (i) assessment of the suitability of the measure for the attainment of the objective

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[110] Gil Carlos Rodríguez Iglesias, 'The Court of Justice, Principles of EC Law, Court Reform and Constitutional Adjudication' (2004) 15 European Business Law Review 1115, 1117.
[111] Art 6 and 7, Protocol (No 2), TFEU.
[112] Guido Noto La Diega, 'Artificial Intelligence and Databases in the Age of Big Machine Data' (2018) 25 AIDA: Annali italiani del diritto d'autore, della cultura e dello spettacolo 93, 101.
[113] Josef Drexl and others, 'Artificial Intelligence and Intellectual Property Law - Position Statement of the Max Planck Institute for Innovation and Competition' (Max Planck Institute for Innovation and Competition 2021) Position Statement 21–10 7.
[114] Senftleben and Buijtelaar (n 4) 803.
[115] Bernt Hugenholtz and others, 'Trends and Developments in Artificial Intelligence - Challenges to the Intellectual Property Framework' (European Commission 2020) 81.
[116] Art 5(5) TEU.
[117] Nicholas Emiliou, *The Principle of Proportionality in European Law: A Comparative Study* (Springer Netherlands 1996) 140.
[118] A first preliminary step entails assessment of the legitimacy of the pursued objective.

(the appropriateness principle),[119] (ii) the evaluation of the necessity of the measure (are there other, equally suitable, less restrictive measures capable of attaining the same objective), and (iii) balancing the negative impact of the restrictions imposed against the added value (proportionality *stricto sensu*).[120] These factors, while distinct from one another, eventually emerge as communicating vessels.[121]

In copyright law, the proportionality test has been described as a "mega" or "golden" standard.[122] Assessing the proportionality of a legislative measure in the field of AI-generated works also requires an evaluation of the three factors. First, the suitability test requires that copyright law be the most appropriate measure to attain the objective at stake. Thus, copyright protection would be suitable if there is an existing or imminent obstacle to trade in the context of AI-generated works and if left in the public domain, the functioning of the internal market would be disturbed. As the previous section demonstrated, at this stage of research, there is not enough evidence to support this assertion, so it is questionable whether the suitability test will be met. Nonetheless, even if such evidence emerges, the necessity test, namely the second factor, is what could present more serious obstacles to pass legislation of this kind. Copyright protection must be the least restrictive measure to achieve the said objective. Here, potential significant challenges emerge with respect to copyright duration and scope. The term of copyright protection for literary, artistic and musical works is particularly long – it lasts for the life of the author plus 70 years.[123] Furthermore, a copyright holder is granted economic rights, the scope of which is typically interpreted broadly.[124] Many of these rights are exclusive, meaning that only the copyright holder can authorise the use of their work and other parties are prohibited from using the work. Thus, as the works generated by AI process under discussion here fall within the traditional subject matter categories, ie literary, artistic and musical works, the duration and scope of copyright protection might be excessively and unnecessarily long and broad. Should IPRs expand to cover these works, there may be less restrictive means to achieve the goal of safeguarding the internal market.[125] With this in mind, in 2017 Ana Ramalho emphasised the distinction between creation and dissemination of AI works.[126] She argues that while market failure issues surrounding the creation of AI-generated works arguably do not arise, since the stakeholders involved in the process are already incentivised and compensated throughout the various stages (or because the AI system does not need to be incentivised in the same manner a human author does), she argues that AI companies may be less inclined to *disseminate* AI-generated works. In theory, such a proposal may be convincing, but it still needs to be backed up by convincing qualitative and quantitative evidence. The priority content industries where AI-generated output is making a difference – journalism, music, art and video games – seem to have embraced AI regardless of copyright protection. In

[119] Wolf Sauter, 'Proportionality in EU Law: A Balancing Act?' (2013) 15 CYELS 448, 448–449.

[120] Aharon Barak, *Proportionality: Constitutional Rights and Their Limitations* (1 edition, Cambridge University Press 2012) 131–133; 243–338.

[121] Peter Teunissen, 'The Balance Puzzle The ECJ's Method of Proportionality Review in EU Copyright Law' (2018) 40 EIPR 579, 582.

[122] Orit Fischman Afori, 'Proportionality – A New Mega Standard in European Copyright Law' (2014) 45 IIC 889; Alain Strowel and Hee-Eun Kim, 'The Balancing Impact of General EU Law on European Intellectual Property Jurisprudence' in Justine Pila and Ansgar Ohly (eds), *The Europeanization of Intellectual Property Law: Towards a European Legal Methodology* (OUP 2013) 121.

[123] Directive 2006/116/EC, art 1(1).

[124] See the following, among many others: *Infopaq* (n 100) para 43; *Painer* (n 6) para 96; *Case C-301/15 Soulier and Doke* [2016] CJEU ECLI:EU:C:2016:878 [30]; *Case C-469/17 Funke Medien NRW GmbH v Bundesrepublik Deutschland* [2019] CJEU ECLI:EU:C:2019:623 [70].

[125] This may be in the form of a neighbouring or related right; See, among others, Senftleben and Buijtelaar (n 4); Ramalho, 'Will Robots Rule the (Artistic) World? A Proposed Model for the Legal Status of Creations by Artificial Intelligence Systems' (n 4).

[126] Ramalho, 'Will Robots Rule the (Artistic) World? A Proposed Model for the Legal Status of Creations by Artificial Intelligence Systems' (n 4) 22.

these fields, resort to AI seems to be driven by other considerations such as efficiency, delivering more relevant content, discovering and engaging new audiences and even inspiring human creation.[127] The argument of stifling innovation also seems to be unconvincing since empirical evidence demonstrates that companies are innovating with public domain material regardless of the presence of exclusive rights in the source material.[128]

AI processes are capable of generating a large amount of literary, musical and artistic works, in the span of several seconds. In light of the term of protection, if these works are automatically covered by copyright law, then the public domain will inevitably be jeopardised, and for a very long time. This brings the discussion to the third factor – proportionality *stricto sensu.* It is essential to consider and respect the interests of stakeholders, other than the AI creation and dissemination teams. An open and inclusive public discussion on copyright and AI via public consultations is essential. In previous copyright legislation, this has led to introducing exceptions and limitations tailored to the interests of users.[129] Overall, the driving underlying concern in this last step is the safeguard of an articulated public domain, where the fundamental right to freedom of expression is central.[130]

In sum, should copyright law be extended to protect AI-generated works, the proportionality principle must necessarily step in and ensure that the EU measure does not lead to over-protection, an eventual "tragedy of anticommons" and overexploitation of authorial rights.[131] However, in practice, it is questionable whether and to what extent these procedural safeguards would have a real effect. Subsidiarity and proportionality have often been criticised for being mere methods of window dressing and that only those legislative choices which "verge on the absurd" are likely to be condemned under the proportionality principle.[132] Nonetheless, the EU legislature is vested with a large discretion on the choice and content of a measure. In a field of complex technical nature, such as copyright and AI-generated works, the constitutional safeguards offered by the subsidiarity and proportionality principles can be of real use. While normally they do not bite, in copyright lawmaking they should, as the field requires a very delicate multi-stakeholder balance. The safeguards could fine-tune and tailor the exact intensity of the proposed legislative measure to further avoid future judicial challenge.[133]

4. Copyright is not suitable to balance the internal market for AI-generated works

When confronted with the question of copyright authorship of a work generated by an "autonomous robot", a 2016 study on "European Civil Law Rules in Robotics" commissioned by the European Parliament suggests that "there is no need to overhaul the whole body of

[127] Kincsö Izsak and others, 'Opportunities and Challenges of Artificial Intelligence Technologies for the Cultural and Creative Sectors' (European Commission 2022) SMART 2019/0024 30 <https://op.europa.eu/en/publication-detail/-/publication/359880c1-a4dc-11ec-83e1-01aa75ed71a1/language-en> accessed 23 November 2022.
[128] Kristofer Ericksen, 'Defining the Public Domain in Economic Terms—Approaches and Conse- Quences for Policy' [2016] Etikk i praksis, Nordic Journal of Applied Ethics 61, 67–68.
[129] See for instance Directive 2001/29/EC, art 5.
[130] Mauritz Kop, 'AI & Intellectual Property: Towards an Articulated Public Domain' (2020) 28 Texas Intellectual Property Journal 297, 324.
[131] Michael Heller, 'The Tragedy of the Anticommons: Property in the Transition from Marx to Markets' (1998) 111 Harvard Law Review 621; Michael Heller, 'The Tragedy of the Anticommons: A Concise Introduction and Lexicon: The Anticommons' (2013) 76 The Modern Law Review 6.
[132] Weatherill (n 18) 844–847.
[133] *Case C-401/19 Republic of Poland v Parliament and Council* [2022] CJEU ECLI:EU:C:2022:297.

literary and artistic property law, but merely to adjust it in the light of the autonomous robots' new/future abilities".[134] The study does not put forward any concrete proposal, but still, statements of this kind must be approached carefully. If there is a need to "adjust" the copyright system in respect of AI-generated works, the crucial questions that lawmakers should ask themselves before moving forward with regulatory efforts are: *Is copyright law the most adequate tool? If there is a regulatory gap, should it necessarily be copyright law that fills it up?*

These normative questions indeed mirror the necessity step of the proportionality principle. However, since sometimes proportionality in the EU constitutional order is a mere smokescreen, this thorough assessment of alternative less restrictive measures is oftentimes neglected. That said, a proper legal basis for lawmaking remains a constitutional cornerstone of the EU. From the standpoint of the EU legislative competences, we see that if positioned on the internal market side of the scale as per Article 114, the EU has the competence to harmonise the laws of the MS. If, instead, copyright law-making stays within the cultural competences of Article 167, the Union's powers are only coordinating and supporting, excluding the possibility to adopt any harmonising measure. Copyright law does not squarely fall within one of these two domains.

A legislative measure can however have more than one objectives. For most copyright directives, that would be an economic one and a cultural one. What matters is the centre of gravity of the legislation.[135] This means that in order for legislation to have a place under the harmonisation umbrella of Article 114, its economic concerns cannot be merely incidental. That said, to achieve a balanced internal market when harmonizing national copyright laws, the legislator also considers other factors. In particular, in addition to the approximation of the laws of the MS, in copyright law the following are equally important benchmarks to weigh in: (i) the respect for national cultures and traditions; (ii) the protection of creators; (iii) the protection of end users; and (iv) the promotion of competitiveness of the EU industries.[136] Applying these benchmarks to the AI-generated works authorship conundrum, it follows that future copyright legislation must not only cater for the economic concerns of the industries involved in computational creativity. While in the words of the CJEU this may seek to prevent "future obstacles to trade",[137] that would only meet the final benchmark, namely the promotion of the EU industries' competitiveness . Besides, in the context of cultural policy, some authors have suggested that "powerful and vocal economic operators"[138] drive certain cultural interests during the legislative process.[139] Importantly, any future legislation in this field must be carefully tailored to protect the human authors and their intellectual free and creative choices, but also end users. When legislating, it is common that not all benchmarks are met. This is usually because when legislation is proposed, it has one or two central drivers in mind, eg catering for the database or the computer program industry's concerns. What the legislature should strive for is meeting all benchmarks to a certain extent, rather than a few to a large extent.[140] At present, bearing in mind the investment narrative promoted by the EU institutions in their various policy papers in the field of AI and IP and the EU's goal of becoming a global leader in AI, it does not seem like the cultural aspects and the protection of end users are taken

[134] Nathalie Nevejans, 'European Civil Law Rules in Robotics' (European Parliament, JURI 2016) PE 571.379 6.
[135] *Tobacco Advertising I* (n 23) para 54.
[136] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14) 147.
[137] *Tobacco Advertising I* (n 23) para 86.
[138] Craufurd Smith (n 61) 885.
[139] 'CREATe Online Public Lecture "Reflecting on the Public Voice in Copyright Consultations" - Lee Edwards and Giles Moss' (n 104).
[140] Ramalho, *The Competence of the European Union in Copyright Lawmaking* (n 14) 147.

as seriously as the economic ones. A real concern for cultural aspects, though, would entail focus on access to works, the public domain[141] and a clear understanding of the highly populated EU IPRs landscape.

Another disproportionate consequence of potential protection is that beneficiaries of this copyright expansion might resort to exploitative techniques. One of the revolutionary features of AI processes is their capability to generate a vast amount of works. Infringement of copyright law in the EU does not require wilful intent. Instead, each economic right bears its own conditions for infringement, but intent is not one of them. For instance, one can be held liable for infringement of the reproduction right if they have copied the author's own intellectual creation.[142] Thus, beneficiaries of this "new copyright" protecting AI-generated works could initiate copyright infringement lawsuits against many "innocent" parties. It is not entirely excluded that a computational creativity software fed with millions of works in a certain genre has already generated many works very similar to those of other human artists in that same genre. So, should these numerous AI-generated works be vested with copyright protection, the rightholders of this "new copyright" can identify one work that resembles a work by a competitor. This could potentially lead to a valid copyright infringement claim. Now, coming back to the main question – is copyright protection for AI-generated works a proportionate measure in such a setting? It is highly doubtful.

5. Conclusion

This paper has argued that copyright law is not suitable to balance the internal market when it comes to AI-generated works. While copyright law-making closely follows the flexible internal market narrative, cultural considerations have so far stayed in the background. This paper has demonstrated that should the EU decide to legislate in this field relying on Article 114 TFEU, the principles of better regulation, subsidiarity, and most importantly, proportionality should bar any such legislative proposal; or at least, curtail it appropriately. Extending copyright protection to cover AI-generated works bears costs of various nature – legislative, regulatory and implementation, but also general transaction and licensing costs for the affected stakeholders. Indeed, having to deal with yet another property right in the highly populated landscape of EU IPRs must be very well justified to avoid overprotection and sacrificing our articulated public domain. Copyright law is constantly searching for a balanced system – between rightholders and users. Thus, user rights and the fact that they would be required to secure yet another license is not necessarily in sync with the narrative of fostering creativity.

[141] Kop (n 130).
[142] *Infopaq* (n 100) para 48.