

SABINE JACQUES* / MATHEW FLYNN**

Protecting Human Creativity in AI-Generated Music with the Introduction of an AI-Royalty Fund

Artificial Intelligence (AI) is posited to revolutionise the creative industries, prompting global calls for legislative intervention to ensure human creativity remains at the centre of the copyright system. As AI systems gain prowess in analysing and generating content, they promise new levels of creativity and innovation at accelerated pace and reduced costs compared to human production. Alongside these benefits come concerns of displacement, particularly in fields like music, where AI-generated music could potentially supplant human-authored creative endeavours. Suggestions ranging from taxation to levies have been proposed to address this challenge. This paper, however, advocates for a novel perspective: evolving copyright law to not only compensate creators for income lost to technological disruption but also to foster sustainability aligned with the principles of the Council of Europe's European Social Charter. Proposing an 'AI-royalty fund' represents a more optimal approach to this dilemma. Such a fund would acknowledge the intrinsic value of music and support a sustainable and inclusive creative industry ecosystem. Essential to this vision is the role of a national collective, entrusted with administering this fund to ensure equitable distribution and uphold the interests of human authors in an AI-driven landscape, contribute to regional and local plans of growth and foster cultural diversity and innovation. In essence, as AI redefines the boundaries of creativity, adapting the copyright paradigm becomes imperative to preserving the livelihoods of human creators while promoting a resilient and sustainable creative economy.

1. Introduction

Overtime, the music industry has been perpetually transformed by technological advancements, transitioning from tapes, vinyl, and CDs to the era of streaming platforms.¹ This swift digital evolution has not only redefined music consumption but also reshaped copyright policy and the industry itself. Today, authors and musicians can create and distribute their works with unprecedented speed, while consumers enjoy unparalleled access to vast music libraries at their fingertips. Consequently, the industry has had to adapt, with paid subscriptions becoming the primary driver of growth in response to this digital shift.² While some technological advancements have

disrupted traditional models,³ others have paved the way for new career opportunities, akin to the impact of sound in motion pictures and the advent of radio and television broadcasting.⁴

Currently, the industry faces new challenges linked to the emergence of AI systems capable of generating new content that imitates human-created works. These AI outputs, produced through sophisticated algorithms that learn from human-created content, present unprecedented issues for copyright policy and the creative industries.⁵ Unlike previous innovations that reduced production costs or facilitated the dissemination of human-created content, AI systems now autonomously generate content, provided they are trained on high-quality human-created materials.

The question remains whether AI-generated content will push copyright to its limits or if the existing framework can adapt to these new production methods.

* Dr, Senior Lecturer in Intellectual Property Law at the University of Liverpool, School of Law and Social Justice, Liverpool, UK. Jacques is the corresponding author and can be contacted at sabine.jacques@liverpool.ac.uk. Both authors would like to thank the anonymous reviewers for their comments, remaining errors are the authors' own responsibility.

** Dr, Senior Lecturer in Music Industries at the University of Liverpool, School of Music Liverpool, UK.

¹ Alan Krueger, *Rockonomics: What the Music Industry Can Teach Us About Economics (and Our Future)* (John Murray 2019) 22.

² Morten Hviid, Sofia Izquierdo Sanchez and Sabine Jacques, 'Digitalisation and Intermediaries in the Music Industry: The Rise of the Entrepreneur?' (2018) 15(2) SCRIPTed 244-53; Peter Tschmuck, 'From Record Selling to Cultural Entrepreneurship: the Music Economy in the digital Paradigm Shift' in Patrik Wikström and Robert DeFillippi (eds), *Business Innovation and Disruption in the Music Industry* (Edward Elgar 2016) 13-29; DataArt, 'Bridging the gaps in music streaming with data pipelines' (*DataArt*, 3 May 2024) 3 <<https://www.dataart.com/blog/bridging-the-gaps-in-music-streaming-with-data-pipelines>> accessed 17 September 2024; IFPI, 'Engaging with music' 6 <https://www.ifpi.org/wp-content/uploads/2023/12/IFPI-Engaging-With-Music-2023_full-report.pdf> accessed 17 September 2024; Goldman Sachs Research, 'Music streaming services are on the cusp of major structural

change' (Goldman Sachs, 31 July 2023) <<https://www.goldmansachs.com/insights/articles/music-streaming-services-are-on-the-cusp-of-major-structural-change>> accessed 17 September 2024.

³ For insights into how digital recordings have gained value primarily as data rather than as a commercial medium for artistic expression, see Keith Negus, 'From creator to data: the post-record music industry and the digital conglomerates' (2018) 41(3) Media, Culture & society 367-84.

⁴ James P Kraft, *Stage to Studio: Musicians and the Sound Revolution, 1890-1950* (Johns Hopkins University Press 2003) 163.

⁵ For an analysis of the degree of human creativity vs AI systems and the impact on copyright law, see Kateryna Milityna, 'Human Creative Contribution to AI-based Output – One Just Can't Get Enough' [2023] GRUR International 939-49.

Despite the uncertainty, there are compelling philosophical arguments for maintaining a human-centric copyright system and introducing mechanisms to remunerate human authors whose works are used to train AI systems. Copyright inherently assumes human authorship,⁶ evidenced by principles such as the author being the first copyright owner,⁷ the originality requirement tied to the 'author's intellectual creation',⁸ the duration of copyright for authorial works based on the author's life,⁹ the qualifications for protection typically linked to the author's nationality or residency,¹⁰ and infringement provisions.¹¹ Moral rights, as protected by the Berne Convention,¹² further reinforce the notion that authors are human, ensuring they are recognised, and their reputations protected.¹³

However, the commercial implications of machine-created content are profound. If such content remains unprotected by copyright, barring specific contractual obligations, it could be freely reused by anyone.¹⁴ This scenario could deter human creators from producing new works and jeopardise investments made by commercial entities in creative outputs. The potential impact on the creative economy is significant. Although current UK copyright law grants copyright to the programmer behind computer-generated works (a particularity which is not found in neighbouring EU countries' legislations),¹⁵ there is ambiguity regarding whether this refers to the AI system's developer or its user,¹⁶ creating potentially further disincentives for investment in these technologies. And whilst it appears reasonable to support that copyright should vest in the user, the current copyright framework leaves little place to consider the creative processes

leading to new artistic expressions. In fact, copyright protection is granted based on the originality of the resulting work created irrelevantly of the process undertaken.¹⁷ As AI systems increasingly mimic human creativity, distinguishing between human and machine-generated content becomes increasingly challenging.

To reward human creativity and incentivise the creation and dissemination of new works, extending copyright to AI-produced content raises fundamental questions. Is there a need to protect AI-generated works?¹⁸ This debate revives discussions on the nature and value of creativity. If AI-generated music dominates the market, should copyright still reward right-holders if machines can replace human creativity? Does this render traditional copyright rationales obsolete? Industry concerns are being heard. The UK's All-Party Parliamentary Group on Music, for example, has made recommendations for transparency, better record-keeping, and clarifying the copyright status of AI-generated works to protect consumers and understand the extent of AI music production.¹⁹ As AI becomes embedded in the fabric of our society, we now have a window of opportunity to recognise the artistic relevance and social value of music rather than music as valuable data.

Legislators face three main options: do nothing, intervene at the input phase or output phase. The first option would effectively leave it to stakeholders to negotiate agreements and self-regulate but recent developments in the UK show the difficulties in doing so.²⁰ The second option is already the subject of many discussions and demonstrate the practical and legal difficulties in providing an efficient system.²¹ This article focuses on the third option, acting at the output phase. Given the complexities of AI systems, it is currently challenging to determine if specific works were used to produce outputs. Therefore, while it is essential to remunerate authors for their works used in AI training, this article emphasises managing the marketplace offer of AI content. Scholars like Senftleben advocate for an AI levy,²² but this paper proposes an AI-royalty fund managed by a national collective through a collaboration between the Council of Music Makers

6 art 2(6) Berne Convention; Case C-469/17 *Funke Medien* ECLI:EU:C:2019:623, para 19; Case C-145/10 *Painer* ECLI:EU:C:2011:798, paras 87-88; Johannes Fritz, 'The notion of 'authorship' under EU law — who can be an author and what makes one an author? An analysis of the legislative framework and case law' (2024) 19(7) *JIPLP* 552-56; Kalpana Tyagi, 'Copyright, text & data mining and the innovation dimension of generative AI' (2024) 19(7) *JIPLP* 562; Tanya Aplin and Giulia Pasqualetto, 'Artificial Intelligence and Copyright Protection' in Rosa Maria Ballardini, Petri Kuoppamäki and Olli Pitkanen (eds), *Regulating Industrial Internet Through IPR, Data Protection and Competition Law* (Wolters Kluwer 2019) 81-98; Jane C Ginsburg, 'People not Machines: Authorship and what it Means in the Berne Convention' (2018) 49 *IIC* 131.

7 s 11 CDPA 1988.

8 Case C-5/08 *Infopaq* ECLI:EU:C:2009:465, para 45; *Painer* (n 6) para 89; *The Newspaper Licensing Agency Ltd & Ors v Meltwater Holding BV & Ors* [2011] EWCA Civ 890, at 19-21; *Islestar Holdings Ltd v Aldi Stores Ltd* [2019] EWHC 1473 at 101.

9 eg s 12 CDPA 1988.

10 ss 153 (a) and 154 CDPA 1988.

11 ss 16-26 CDPA 1988.

12 art 6^{bis} Berne Convention.

13 It is therefore not surprising to see a ramping up of cases against generative AI services. For an example in regards to the music sector, see *Universal, Capitol, Sony Music, Atlantic, Rhino Entertainment, The All Blacks USA, Warner v Suno and Udio* (filed 24 June 2024) complaint available at <<https://s3.documentcloud.org/documents/24775981/suno-complaint-file-stamped20.pdf>> accessed 17 September 2024.

14 Arguing for copyright protection of AI content, see Söğüt Atilla, 'Dealing with AI-generated works: lessons from the CDPA section 9(3)' (2024) 19(1) *JIPLP* 43-53.

15 s 9(3) CDPA 1988.

16 There is indication that authorship shall lie with the developer and not the user, see *Nova Productions v Mazooma Games* [2007] EWCA Civ 219, at 106 where the Court of Appeal stated that 'The player is not, however, an author of any of the artistic works created in the successive frame images. His input is not artistic in nature and he has contributed no skill or labour of an artistic kind. Nor has he undertaken any of the arrangements necessary for the creation of the frame images'.

17 The creative process can represent a significant factor in the application of copyright exceptions to justify infringement. For instance, in the context of the parody exception, the humorous intent requirement can be evidenced through the creative process used. Similarly, under the doctrine of independent creation, a defendant can contest the establishment of a causal link between the copyright-protected work and the allegedly infringing use by demonstrating that the latter results from an independent creative effort rather than direct copying.

18 Carys J Craig, 'AI and copyright' in Florian Martin-Bariteau and Teresa Scassa (eds), *Artificial Intelligence and the Law in Canada* (LEXIS NEXIS) ch 1.

19 All-Party Parliamentary Group on Music (APPG), 'Artificial Intelligence and the Music Industry – Master or Servant?' (2024) <<https://www.ukmusic.org/wp-content/uploads/2024/04/APPG-AI-Report-Low-res.pdf>> accessed 17 September 2024.

20 House of commons, 'Creator Remuneration' (Fifth Report of Session 2023-24, HC 156) 20 available at <<https://committees.parliament.uk/publications/44143/documents/219382/default/>> accessed 17 September 2024. Nevertheless, some industry stakeholders, recognising these complexities, are taking proactive steps. For instance, the collaboration between YouTube, DeepMind, and Universal Music Group aims to develop an AI framework that enhances music creativity while protecting artists' rights is particularly intriguing.

21 Martin Kretschmer, Thomas Margoni and Pinar Oruç, 'Copyright Law and the Lifecycle of Machine Learning Models' (2024) 55 *IIC* 110-38.

22 Martin Senftleben, 'Generative AI and Author Remuneration' (2023) 54 *IIC* 1535-560.

and The Independent Society of Musicians in the UK. This fund would support local and regional growth whilst protecting musical genres more at risk from AI-produced content, fostering innovation and diversity in music as well as giving prominence to musicians and creators in these debates.

Section I revisits the theoretical foundations of copyright law to understand their relevance in today's creative landscape. Section II presents the main analysis supporting the introduction of a royalty fund, including exploring its operational mode. It reviews alternative interventions like tax-based and levy systems, deeming them suboptimal for sustaining the music sector against machine-produced music challenges. The section concludes with an examination of the royalty fund's rationale and its implications for the entire sector before drawing final conclusions.

II. Going back to basics: the purpose of copyright in the modern creative landscape

Reward and incentive rationales have long been used to justify copyright protection. The reward rationale posits that copyright is granted as recognition for the mental labour and effort involved in creating original expressions and making them accessible to the public. Conversely, incentive-based theories argue that, without copyright, works would be easily copied, discouraging authors from engaging in creative endeavours due to the inability to recoup their investments. While these rationales are often conflated, they diverge fundamentally: the reward theory views copyright as an end in itself, while incentive-based theories see copyright as a means to promote additional original creative expressions and their dissemination within society. In the context of an AI author landscape, the justification for granting exclusive rights becomes tenuous, especially when AI systems can generate new content without requiring any incentives to do so. If content is produced autonomously, there is no human author to claim copyright rewards, although an AI user might claim reward if their prompts embody the author's own intellectual creation. However, society's interest in facilitating the dissemination of creative expressions does not necessarily warrant protecting AI-generated content as machines typically need no incentive to create.²³

Reducing copyright to reward or incentive-based rationales alone is flawed. Natural rights theory offers another perspective, suggesting copyright is granted because original expressions emanate from the human mind.²⁴ Copyright, therefore, protects the unique link between an

author and their creative works. Yet, as new expressions build on existing ones, claims to ownership diminish.²⁵

In an AI-driven landscape, what justifies supporting copyright? Two primary rationales emerge. The first is rooted in human rights, specifically the relationship between copyright and communication. Here, copyright protects the 'expressive autonomy' of the author.²⁶ When AI-generated content reproduces protected expressions without authorisation, it infringes upon the author's autonomy, especially if the original expression is altered. This rationale supports robust rights for authors but also acknowledges necessary limitations: an author's rights must yield when another needs to copy parts of a work to express themselves effectively.²⁷

This has led to distinctions between 'expressive uses' and 'non-expressive uses' of copyright-protected works in an AI-driven landscape.²⁸ Copyright should only regulate expressive uses that involve human appreciation or enjoyment. Non-expressive uses, such as machine learning processes, should fall outside the scope of right-holder control.²⁹ The copyright system already recognises this distinction to some extent, exempting temporary reproductions integral to technological processes from infringement,³⁰ provided they enable lawful use and have no independent economic significance.³¹ However, AI outputs mimicking human works will likely have economic value and thus, should not be exempt.³²

Additionally, the copyright system includes fair dealing provisions for purposes of research and private study,³³ text-and-data mining for non-commercial research,³⁴ criticism, review, quotation and news reporting,³⁵ and caricature, parody or pastiche.³⁶ These defences allow human

²⁵ For a recent discussion of these theories considering user's rights, see Mitchell Longan, 'A system out of balance: a critical analysis of philosophical justifications for copyright law through the *Lenz* of users' rights' (2023) 56(3) *University of Michigan Journal of Law Reform* 779-826.

²⁶ Building on Immanuel Kant; see Abraham Drassinower, 'Copyright Infringement as Compelled Speech' in Annabelle Lever (ed), *New Frontiers in the Philosophy of Intellectual Property* (CUP 2012) ch 8; Laura Biron, 'Public Reason, Communication and Intellectual Property' in Annabelle Lever, *New Frontiers in the Philosophy of Intellectual Property* (CUP 2012) ch 9; Anne Barron, 'Kant, copyright and communicative freedom' (2012) 31(1) *Law and Philosophy* 1-48; Kim Treiger-Bar-Am, 'Kant on Copyright: Rights of Transformative Authorship' (2008) 25(3) *Cardozo Arts & Entertainment Law Journal* 1059.

²⁷ Lionel Bently and others, *Intellectual Property Law* (OUP 2022) 43.

²⁸ Rossana Ducato and Alain M Strowel, 'Ensuring text and data mining: remaining issues with the EU copyright exceptions and possible ways out' (2021) 43(5) *EIPR* 334; Maurizio Borghi and Stavroula Karapapa, 'Non-Display Uses of Copyright Works: Google Books and Beyond' (2011) 1 *Queen Mary J Intellect Prop* 45.

²⁹ Matthew Sag, 'Copyright Safety for Generative AI' (2023) 61 *Hous. L. Rev.* 295; Matthew Sag, 'The New Legal Landscape for Text Mining and Machine Learning' (2019) 66 *J. Copyr. Soc. U.S.A.* 301.

³⁰ Case C-360/13 *PRCA v Newspaper Licensing Agency Ltd* ECLI:EU:C:2014:1195, paras 59-61.

³¹ s 28A CDPA 1988; implementing art 5(1) 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 [2001] OJ L167/10-19 ('InfoSoc Directive').

³² Andres Guadamuz, 'A Scanner Darkly: Copyright Liability and Exceptions in Artificial Intelligence Inputs and Outputs' [2024] *GRUR International* 111-27. For current disputes, see above n 10.

³³ s 29 CDPA 1988; implementing art 5(2)(a) or (b) InfoSoc and Case C-117/13 *Technische Universität Darmstadt v Eugen Ulmer KG* EU:C:2014:2196, paras 54-55.

³⁴ s 29A CDPA 1988; implementing art 5(3)(a) InfoSoc.

³⁵ s 30 CDPA 1988; implementing art 5(3)(d) InfoSoc.

³⁶ s 30A CDPA 1988; implementing art 5(3)(k) InfoSoc.

²³ Giancarlo Frosio, 'Should we ban generative AI, incentivise it or make it a medium for inclusive creativity?' in Enrico Bonadio and Caterina Sganga (eds), *A research agenda for EU copyright law* (Edward Elgar) (forthcoming) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4527461> accessed 17 September 2024; Craig (n 18) ch 1; Daniel Gervais, 'The Machine as Author' (2020) 105 *Iowa Law Review* 2053; Ginsburg (n 6) 131; Jane C Ginsburg and Luke Ali Budiardjo, 'Authors and Machines' (2019) 34(2) *Berkeley Technology Law Journal* 343; Christophe Geiger and Vincenzo Iaia, 'The forgotten creator: towards a statutory remuneration right for machine learning of generative AI' (2024) 52 *Comput Law Secur Rev* 105925, 5.

²⁴ There are two main natural rights theories, one is derived from John Locke's labour theory of property and prevails in the US whereas the second one is based on Georg Wilhelm Friedrich Hegel's personality theory and prevails in continental Europe.

users to reproduce copyright-protected materials without authorisation and as these defences take the form of ‘fair dealing’, the use will only be considered lawful provided the dealing is fair. This fairness is assessed contextually,³⁷ often through the perspective of a ‘fair-minded and honest person’.³⁸

There are calls to broaden the text-and-data mining exception beyond non-commercial uses to facilitate the development of AI tools.³⁹ Although a human may devise the prompts, the output is ultimately generated by probabilistic models and decision trees arranging tokens, driven by the machine rather than by human creativity.⁴⁰ Simultaneously, AI companies are exploiting the flexibilities within copyright law to legitimise outputs that mimic the original copyright-protected works. A pertinent example is the reliance on the fair dealing exception for purposes of pastiche, parody or caricature. Stability AI submitted that certain uses fall under the pastiche exception.⁴¹ However, it remains to be clarified whether a distinct exception for pastiche exists within UK copyright law, or if parody, pastiche, and caricature are subsumed under a single exception, given the interconnected nature of these artistic genres.⁴²

The second theory, the ‘democratic paradigm’ proposed by Neil Netanel, views copyright as a means to fortify democratic institutions by promoting public education, fostering debate, and enhancing inclusivity.⁴³ Thus, copyright should neither obstruct technological advancements and modern communication nor be so broad as to hinder human creativity and expressive diversity. Under this lens, copyright should balance market efficiency with the emergence of diverse expressions essential for a healthy democratic society.⁴⁴ This supports ensuring that AI content creation does not impede human participation, advocating for fair remuneration and strong moral rights to protect the personal connection between an author and their work.⁴⁵

The fundamental challenge of copyright law is finding the balance between granting exclusive rights and ensuring user/public access. Copyright has always been controversial, yet creative expressions hold societal value and should be widely disseminated.⁴⁶ Copyright, then, is a means to strike a fair balance between the author’s rights, intermediaries facilitating dissemination, and end users.

In 2008, Ng already highlighted the under-discussed concept of authorship as a human endeavour, a crucial aspect for copyright policymaking.⁴⁷ Authorship represents a human activity, not a machine’s, and this connection with the audience transcends societal, temporal, and cultural boundaries. In the context of AI, value shifts toward corporate stakeholders, transforming production and exploration of content.⁴⁸ Protecting the emotional response elicited by human-created works becomes therefore paramount.⁴⁹

The current copyright system aims to calibrate authorial rights against social costs, ensuring that rights provided are necessary to incentivise creativity.⁵⁰ Copyright prevents free riders from exploiting an author’s work without authorisation and remuneration, creating an artificial scarcity. However, in an AI landscape where generative AI systems are trained on vast volumes of copyright-protected works, resulting outputs could substitute original markets.⁵¹ This, therefore, supports introducing remuneration mechanisms for human authors.

Without such mechanisms, the creative sector may lobby for opt-in or opt-outs frameworks for using copyright-protected works in AI training.⁵² This could lead to

37 *Hubbard v Vosper* [1972] 2 QB 84.

38 *Hyde Park Residence v Yelland* [2000] EMLR 363, at 38; *Newspaper Licensing Agency v Marks & Spencer* [2000] 4 All ER 239 (CA) at 44.

39 See UKIPO consultation outcome on Artificial Intelligence and Intellectual Property: Copyright and Patents: Government Response to Consultation (28 June 2022) <<https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents/outcome-artificial-intelligence-and-intellectual-property-copyright-and-patents-government-response-to-consultation>> accessed 17 September 2024; Yet, George Freeman MP on 1 February 2023 stated that this broadening of the text-and-data mining exception would not be happening.

40 Although human input is still necessary to analyse AI outputs and refine these.

41 In *Shazam v Only Fools The Dining Experience* [2022] EWHC 1379, the IPEC court paved the way towards a distinct pastiche exception in UK copyright law, modelling the defence on the recent developments in Germany (Kammergericht, 30 October 2019 – 24 U 66/19). There is now a pending referral from German courts in Case C-590/23 *Pelham II* where the CJEU will need to decide on whether there is a distinct pastiche exception to the parody exception in EU copyright law.

42 Above n 10; It is also interesting to note the new Danish copyright exception introduced in 2024, which restricts the scope of parody by explicitly excluding computer programs and databases from its application. See s 24B, subs 3 of the Danish Copyright Act.

43 Neil Weinstock Netanel, ‘Copyright and a Democratic Civil Society’ (1996) 106 Yale LJ 283, 291. For an argument that copyright diminishes diversity, Guy Pessach, ‘Copyright Law as a Silencing Restriction on Non-Infringing Materials: Unveiling the Scope of Copyright’s Diversity Externalities’ (2003) 76 S Cal L Rev 1067.

44 Netanel (n 43) 288.

45 Also suggested in the US, as the way has been paved by Jeanne C Fromer, ‘Expressive incentives in Intellectual Property’ (2012) 98

Virginia Law Review <https://law.stanford.edu/wp-content/uploads/sites/default/files/event/265497/media/slspublic/Expressive_Incentives_in_Intellectual_Property_1.pdf> accessed 17 September 2024.

46 Simone Schroff, ‘The Purpose of Copyright – Moving beyond the Theory’ (2021) 16(11) JIPLP 1262, 1263.

47 Alina Ng, ‘The Social Contract and Authorship: Allocating Entitlements in the Copyright System’ (2009) 19 Fordham Intell Prop Media & Ent LJ 413.

48 According to recent empirical research findings, the impact of AI tools in the human creative workflow of text-to-image generation leads to an average decline of novelty overtime although early adopters evidence novelty in content linked to new idea exploration. In other words, novelty in ideas and aesthetic is overall on the decline in an AI landscape. Eric Zhou and Dokyun Lee, ‘Generative artificial intelligence, human creativity, and art’ (2024) 3(3) PNAS Nexus 1–8.

49 For more on the meaning of authorship in an AI age in the music sector, see Jean-Marc Deltorn and Franck Macrez, ‘Authorship in the Age of Machine Learning and Artificial Intelligence’ in Sean M O’Connor (ed), *The Oxford Handbook of Music Law and Policy* (online, Oxford Academic, 9 July 2020) <<https://doi.org/10.1093/oxfordhb/9780190872243.013.3>> accessed 17 September 2024.

50 Mark A Lemley, ‘Property, Intellectual Property and Free Riding’ (2005) 83 TEX. L. REV. 1066.

51 LLMs do not directly ‘hold’ copyright-protected works, Guadamuz (n 32).

52 The report on the creative industries highlighted that the £ 108 billion sector depends on copyright protections and expressed concern over the IPO’s proposals, which were seen as potentially undermining existing business models. HL, ‘Large language models and generative AI’ (1st Report of Session 2023–24, HL Paper 54) 66 <<https://publications.parliament.uk/pa/ld5804/ldselect/ldcomm/54/54.pdf>> accessed 17 September 2024; HL, ‘At risk: our creative future’ (2nd Report, Session 2022–23, HL Paper 125) 53. The £ 108 billion figure refers to a more recent update from the Government. See Department for Culture, Media and Sport, ‘Ambitious plans to grow the economy and boost creative industries’ (June 2023) <<https://www.gov.uk/government/news/ambitious-plans-to-grow-the-economy-and-boost-creative-industries>> accessed 17 September 2024.

practical difficulties⁵³ and adverse consequences for AI development, which relies on quality original materials to innovate and reflect societal changes.⁵⁴ Therefore, the availability of new creative expressions is valuable for both AI development and societal progress.⁵⁵

In this context, supporting the remuneration of human creativity is imperative, raising questions about the best ways to achieve this.

III. Legal intervention at the output phase

If we agree that no legislative intervention is not an option, the legislator faces a theoretical choice between requiring remuneration at the input stage⁵⁶ or the output stage. However, as previously discussed, the copyright system permits copying for text-and-data mining for non-commercial purposes without right-holder(s) authorisation. There are now calls to broaden this exception to cover commercial uses as well.⁵⁷ Introducing a remuneration mechanism at the training stage presents significant legal and practical challenges,⁵⁸ particularly in terms of data management, processing and payment distribution, and establishing an efficient clearance system when vast amounts of works are involved in AI training.⁵⁹

⁵³ Digital companies advocate for an opt-out system, while right-holders prefer an opt-in approach. However, neither system is ideal, as both face concerns regarding the initial extraction of content. HL, 'Large language models and generative AI' (n 52) 71.

⁵⁴ As also recently argued by Carys J Craig, 'The AI-copyright trap' (2024) draft available at <<https://ssrn.com/abstract=4905118>> or <<http://dx.doi.org/10.2139/ssrn.4905118>> both accessed 17 September 2024.

⁵⁵ HL, 'At risk: our creative future' (n 52) 53; the Government's continued commitment 'to promote and reward investment in creativity' and ensure right-holders' protected content is 'appropriately protected' while also supporting AI innovation was repeated in Department for Culture, Media and Sport, 'Ambitious plans to grow the economy and boost creative industries' (June 2023) <<https://www.gov.uk/government/news/ambitious-plans-to-grow-the-economy-and-boost-creative-industries>> accessed 17 September 2024.

⁵⁶ Proposing a statutory license, see Geiger and Iaia (n 23) 105925.

⁵⁷ In 2022, the UKIPO proposed altering the system to permit any form of commercial mining. The complexities associated with this issue are evident from the struggles faced by the Government's working group on AI and intellectual property in reaching consensus on a code of practice for using copyright-protected materials during the AI training phase. Secretary of State for Science, Innovation and Technology, Consultation Outcome 'A pro-innovation approach to AI regulation: government response' (February 2024, Command Paper: CP 1019) <<https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response>> accessed 17 September 2024.

⁵⁸ As demonstrated in *Andersen v Stability AI* (2024) Case No 23-cv-00201-WHO (USDC Northern District of California) where the district court found plausible allegations that copyright-protected works were used to train AI models and remain within the outputs through 'compressed copies'. Both direct and indirect infringement are contemplated as GenAI services might facilitate infringement by design. The Court also seem to depart from traditional conceptualisation of copyright infringement. It remains to be seen how the case will proceed.

⁵⁹ The wheels are in motion in the EU, where the AI Act despite not addressing copyright law directly does contain provisions which indirectly relates to copyright and introduces a transparency mechanism to promote the aim of trustworthiness, requiring that developers of certain AI systems 'draw up and make publicly available a sufficiently detailed summary of the content used for training the general-purpose model [...] to facilitate parties with legitimate interests, including copyright holders, to exercise and enforce their rights under Union law' (art 53); Jonas Andriulis, CEO of Aleph Alpha, said it was 'technically not possible to trace the origin of a certain word or sentence down to one or even a handful of sources'. House of Lords, 'Communications and Digital Select Committee, Corrected oral evidence: Large language models' (21 November 2023) Q108 <<https://committees.parliament.uk/oralevidence/13866/html/>> accessed 17 September 2024. AI music companies, Udio and Suno, are starting to acknowledge that copying took place

While some might argue against imposing remuneration on the output stage – suggesting that AI-generated content merely reproduces ideas, patterns, or other non-copyright-protected elements – these objections are not fatal.⁶⁰ Firstly, there is evidence of substitution risks, as previously discussed, making it legitimate to argue that human authors deserve protection from these risks arising from the use of their creative expressions in AI training.⁶¹ Secondly, a remuneration mechanism would level the playing field between AI-generated content and human-created works, focusing on economic aspects rather than on the perceived entitlement of who should hold creativity.

This article argues for intervention at the output stage as well as supporting the music industry's calls for increased transparency regarding AI systems.⁶² Such transparency would provide the necessary information to create a new revenue stream for human creators, addressing the disruptive effects and income losses caused by generative AI systems. This legislative intervention would not only protect the financial interests of human authors but also reinforce the value of human creativity in an increasingly automated world. It represents a proactive step in mitigating the disruptive impact of AI on creative industries, ensuring the rights and livelihoods of human authors are protected as the digital landscape continues to evolve.

Several options exist for this intervention, ranging from taxation in response to automation in the creative sector to the introduction of a levy system. However, the most promising approach is arguably the introduction of an AI-royalty fund, which would support human creators in leveraging AI tools and applications within their creative workflows.

1. A tax-based system

A tax-based model is a well-established strategy designed to enhance the equity and fairness of technological progress. Implementing such a tax could provide essential economic support for workers displaced by advancements in automation, particularly within the creative industries. Beyond financial relief, this model incentivises more strategic decision-making regarding the adoption of automation technologies, especially where the benefits are marginal. By imposing a tax, policymakers can encourage a more thoughtful and balanced approach to technological integration, ensuring that progress does not come at the expense of human livelihoods. This dual approach

with Suno going even further saying it trained its model on '[...] tens of millions of recordings [...] which [...] includes essentially all music files of reasonable quality that are accessible on the open Internet [...]'. Both Udio and Suno claim that copying and training is covered by fair use. As reported here: <<https://www.404media.co/ai-music-generator-suno-admits-it-was-trained-on-essentially-all-music-files-on-the-internet/>> accessed 17 September 2024.

⁶⁰ As comprehensively outlined by Martin Senftleben, 'AI Act and Author Remuneration – A Model for Other Regions?' (24 February 2024) 15 <<https://ssrn.com/abstract=4740268>> accessed 17 September 2024.

⁶¹ eg how TikTok transforms music production by requiring ten seconds hooks to maximise chances of visibility.

⁶² All-Party Parliamentary Group on Music (APPG), 'Artificial Intelligence and the Music Industry – Master or Servant?' (2024) <<https://www.ukmusic.org/wp-content/uploads/2024/04/APPG-AI-Report-Low-res.pdf>> accessed 17 September 2024.

promotes fairness and fosters a more sustainable and equitable technological landscape.

In Europe, several taxation initiatives target digital services. For example, the UK has implemented a 2% tax on revenues derived from UK users of social media platforms, search engines, and online marketplaces.⁶³ France introduced a tax on music streaming services at the end of 2023, which took effect at the start of 2024.⁶⁴ This 1.2% revenue tax applies to services like Spotify, Apple Music, and YouTube Music, covering both subscription fees and ad revenue. The aim is to raise funds for the Centre of National Music, a quasi-governmental body that coordinates various programs supporting music creation in France, including music creation and distribution, live performances, support for independent music retailers, and the export of French artists.

More recently, Canada's telecom regulator introduced a 5% revenue tax on music streaming services to support the creation of Canadian content.⁶⁵ However, these initiatives have not been favourably received by the streaming services sector, which characterises them as discriminatory.⁶⁶ This has also led to increases in subscription fees for consumers and a reduction in financial support for the domestic music scene.⁶⁷ While these measures align with cultural protectionism, they may not be the best course of action for the UK, which is a net exporter of culture.⁶⁸ The UK government traditionally funds less commercial cultural protection, such as classical music or modern art, or very specific initiatives like the BBC TV licensing fee.

While the advantages of a tax system are evident, there are also numerous challenges, especially in countries lacking the national infrastructure to administer these funds.⁶⁹ Additionally, leaving this matter in the hands of the political parties in power can pose further difficulties. Therefore, the copyright system may constitute a better avenue for addressing the financial impacts of AI and automation on the creative industries.⁷⁰

⁶³ Digital Services Act Manual Digital Services Tax Manual – HMRC internal manual – GOV.UK (<www.gov.uk>).

⁶⁴ art 160⁹sexdecies C of the French Finance Act.

⁶⁵ There are a number of other countries which have implemented similar taxes to support their local cultural industries – but most of them focus on film and TV, not music. For instance, among European countries, [Denmark](#), [Portugal](#), [Romania](#), [Spain](#) and [Switzerland](#) have all implemented some form of 'Netflix tax', charging a fee on video streaming services to fund local film/TV production. Service providers called this a 'discriminatory tax'.

⁶⁶ <<https://www.musicbusinessworldwide.com/whats-behind-france-and-canadas-music-streaming-taxes-and-where-might-they-happen-next-hint-the-usa/>> accessed 17 September 2024.

⁶⁷ eg Spotify withdrew its financial support for two festivals, the Francofolies de la Rochelle and the Printemps de Bourges.

⁶⁸ House of commons, 'Creator Remuneration' (Fifth Report of Session 2023-24, HC 156) 15 <<https://committees.parliament.uk/publications/44143/documents/219382/default/>> accessed 17 September 2024.

⁶⁹ Tetsuya Watanabe, 'Rationales and Challenges for a Digital Service Tax: Focusing on Location-Specific Rent' (2021) 17(1) Policy Research Institute, Ministry of Finance, Japan, Public Policy Review 1-17.

⁷⁰ The Copyright Licensing Agency said that there were already collective licensing mechanisms providing a 'practical' system for developers to access data responsibly. The Copyright Licensing Agency Ltd – written evidence (LLM0026) for House of Lords Communications and Digital Select Committee inquiry: 'Large language models' at 256 <<https://committees.parliament.uk/writtenevidence/124193/html/>> accessed 17 September 2024.

2. A levy-based model

The concept behind implementing a levy system, such as a percentage of advertising revenue or subscription fees, is to require AI system providers to pay remuneration for content production that could potentially substitute human creative expressions. As convincingly argued by Senftleben, this new remuneration mechanism could be modelled after Art. 8(2) of the old EU Directive on rental, lending and related rights.⁷¹

This proposal for a lump-sum remuneration is appealing, primarily because it circumvents the complex issue of determining the degree of substitution between AI-generated content and human works. Addressing this at the input stage involves challenging discussions about the inscrutability of AI systems' *modus operandi* during the training phase.⁷² Following Senftleben's proposal, the levy approach would support human creativity by establishing a new mandatory revenue stream managed by collecting rights societies at the output stage. And although AI systems providers might cease offering these tools for free, this might be a necessary trade-off, potentially reducing the attractiveness of these services.⁷³

As recognised by Senftleben, further customisation of the levy model could be envisioned, such as ensuring no levy is required when human creators use AI to produce new literary and artistic expressions. In standard levy systems for private copying, there is a comparable differentiation between personal use of copying equipment, devices, and media (leading to levy payments) and their professional use outside the private sector (exempt from such payments).⁷⁴

In the UK, the government attempted to legislate on private copying in 2014 with Sec. 28B of the Copyright, Designs and Patents Act (CDPA), which would have allowed copying copyright-protected materials for private, non-commercial use without right-holders' authorisation or compensation.⁷⁵ However, the High Court's judicial review found the government's assessment of insignificant harm insufficient based on the evidence provided, ultimately quashing the exception.⁷⁶ Today, new calls for a UK private copying exception with remuneration are being heard,⁷⁷ especially as international experiences have shown that such revenue streams can be substantial. Without reciprocity arrangements in place, income from private copying uses in territories with similar exceptions is in jeopardy.⁷⁸

⁷¹ Senftleben, 'Generative AI and Author Remuneration' (n 22) 1549; Senftleben, 'AI Act and Author Remuneration – A Model for Other Regions?' (n 60).

⁷² Likely to be protected by trade secrets.

⁷³ Senftleben, 'Generative AI and Author Remuneration' (n 22) 1550.

⁷⁴ *ibid*; Case C-467/08 *Padawan SL v Sociedad General de Autores y Editores de España (SGAE)* ECLI:EU:C:2010:620, paras 52-53 and 59; Frosio (n 23).

⁷⁵ The Copyright and Rights in Performances (Personal Copies for Private Use) Regulations 2014, reg 3.

⁷⁶ *British Academy of Songwriters, Composers and Authors Musicians' Union & Ors, R (on the application of) v Secretary of State for Business, Innovation and Skills & Anor* [2015] EWHC 2041 (Admin) (17 July 2015)

⁷⁷ House of commons, 'Creator Remuneration' (n 20).

⁷⁸ *ibid*.

This levy proposal has garnered support in the UK, where there is a proposal for a Smart Fund.⁷⁹ Under this model, ‘technology manufacturers would pay a small fraction of the value of each device sold into a fund that can be paid out to creators, with a portion flowing to local community projects focusing on digital creativity and skills’. Concerns about the model’s impact on consumers were alleviated by empirical evidence showing no significant spike in device prices in countries with such a levy compared to those without. While this model is not currently considered in the UK for AI systems, its future application to private copying devices remains of interest.

However, entrusting collecting rights societies with administering the fund has inherent flaws.⁸⁰ Despite having the infrastructure to facilitate the fund’s operation, several considerations arise. First, collecting rights societies act only for their members, and since membership is not mandatory, many right-holders might not benefit from the newly generated income, raising inequality concerns.⁸¹ Second, collective rights societies may not adequately represent the music industry as a whole, often balancing interests that favour more popular right-holders, leading to dissatisfaction among lesser-known right-holders and posing inclusivity concerns. Third, some societies might prioritise revenue maximisation over equitable revenue distribution among members. Fourth, relying solely on collective management organisations could generate conflicts of interest between the societies’ pressures from stakeholders and their members’ interests. Fifth, given the layering of rights and the number of protected works used in AI systems, ensuring meaningful revenue generation is inherently challenging (especially in terms of management of metadata). Finally, representing only sections of the industry, they are not the best-placed to ensure that wider socio-cultural goals are achieved.

3. A royalty-fund approach

This proposal represents another form of lump sum remuneration from subscriptions and advertising revenues, albeit not an entirely novel concept. The idea mirrors the ‘Record-Royalty Fund’ established in the 1940s in the United States.⁸² In 1942, the American Federation of Musicians (AFM) called for a ban on recording music. Before this, recording for radio had not been a significant issue; some revenue flowed to creators, despite some evidence of decline. However, empirical data showed that music recordings, then referred to as ‘canned music,’ harmed musicians, particularly those reliant on live performances.⁸³

Attempts to break the strike included using voice-only recordings or hiring local musicians for live airplay,

but advertisers preferred high-quality music programs,⁸⁴ highlighting the need for recorded music. Jukebox operators also expressed concerns, arguing that some businesses would never hire live musicians, raising issues of cultural access rights and the right to conduct a business.⁸⁵ Additionally, there were already worries about concentrated ownership in the industry, with a few large corporations controlling vast profits at the expense of musicians’ livelihoods.⁸⁶

In response, the Record and Transcription Fund (or record-royalty fund) was created, endorsing a fixed-fee principle. The union used this fund to create jobs for musicians,⁸⁷ distributing it based on membership size and funding free concerts in the US and Canada where musicians were paid according to union scales.⁸⁸ Later, large corporations agreed to contribute specific amounts to the fund for each record produced, with contributions varying based on the record’s size and price.⁸⁹

Fundamentally, the AFM opposed a techno-cultural system that removed musicians from managing the production and reproduction of their music, rather than opposing a particular technology. This historical event provides key insights into the relationship between human creativity, technology, and industrial action. It demonstrates how creators can collectively control the exploitation of their efforts and manage technological advancements threatening their roles.

Under current conditions, where establishing an effective voluntary code of practice for using copyright-protected materials in AI systems has failed,⁹⁰ and discussions between policy-makers and stakeholders are likely to be challenging, learning from history is crucial.⁹¹ Without such learning, right-holders and authors may refuse to allow their creative expressions in AI systems, potentially leading to more court cases.⁹² This scenario could be detrimental to both the music and tech industries, but especially, to creators whose works are used in training AI systems, given the challenges of applying current copyright provisions to these new uses.

⁸⁴ Chicago Tribune, 30 May 1946, 9.

⁸⁵ Kraft (n 4) 147.

⁸⁶ *ibid* 151.

⁸⁷ *ibid* 153.

⁸⁸ *ibid* 155.

⁸⁹ A similar pattern occurred with the advent of television, where the television industry, struggling to afford musician payments, sought to replicate radio live performances with minimal or no additional compensation. This led to a partnership between the radio and television industries; *ibid* 180.

⁹⁰ Secretary of State for Science, Innovation and Technology, Consultation Outcome, ‘A pro-innovation approach to AI regulation: government response’ (February 2024, Command Paper: CP 1019) <<https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response>> accessed 17 September 2024.

⁹¹ In May 2023, the Writers Guild of America went on strike over pay due to the fear linked to AI systems such as ChatGPT for script writing. <<https://fortune.com/2023/05/05/hollywood-writers-strike-wga-chatgpt-ai-terrifying-replace-workers/>> accessed 17 September 2024; similar industrial action was led by the US actor’s Union <<https://www.wired.com/story/hollywood-actors-strike-ends-ai-streaming/>> accessed 17 September 2024.

⁹² See in the US: *Alter v OpenAI* Nos. 1:23-cv-08292, 1:23-cv-10211, 1:24-cv-00084 (S.D.N.Y.); *Andersen v Stability AI* No. 3:23-cv-00201

⁷⁹ *ibid* at 25.

⁸⁰ Also acknowledged by Kretschmer, Margoni and Oruç (n 21) 133.

⁸¹ Although this may represent a way to increase memberships.

⁸² And later in 1948 in relation to the television industry. As argued by Anderson, these strikes were not trivial but constitute ‘organized moments of critical intervention and protest to the construction of a new, dominant economy of music production that would be based on recordings rather than the production of musical performances’. Tim Anderson, ‘Buried under the fecundity of his own creations: reconsidering the recording bans of the American Federation of Musicians, 1942-1944 and 1948’ (2004) 22(2) *American Music* 232.

⁸³ For more on this recording ban, see Kraft (n 4) ch 6; Scott DeVeaux, *The Birth of bebop: a social and musical history* (University of California Press 1997) ch 7.

a) Copyright justifications for an AI-royalty fund

The copyright system is undeniably designed to foster creativity within society by rewarding authors, thereby incentivising further creative endeavours. However, the commercial exploitation of AI-generated content by corporate entities, particularly when such AI systems are trained on datasets that include unlicensed, copyright-protected works, poses significant challenges to the theoretical foundations of copyright. Previous discussions have highlighted the complexities of regulating the training phase to support both technological and musical industries.⁹³ These complexities include the potential non-infringement of copyright by AI systems, justified usage under exceptions such as text-and-data mining or parody, and the idea/expression dichotomy, which exempts mere ideas or styles from copyright protection.⁹⁴

Nonetheless, it is crucial to recognise that the transformative potential of generative AI is predicated on high-quality materials created by humans. These materials, often protected by copyright, are essential for AI to learn and produce content that mimics human creativity. Such AI-generated content, which could generate significant economic value⁹⁵ or receive favourable evaluations from art critics,⁹⁶ would not exist without the foundational human works. As generative AI becomes increasingly prevalent in content production,⁹⁷ creative fields risk becoming flooded with generic material as exploration diminishes,⁹⁸ the risk of flooding creative fields with generic material grows, potentially stifling innovation and exploration, and resulting in a loss in quality content.

Theoretical justifications for modern copyright law further support a socio-cultural approach for creativity. There is no denying that the advent of the internet and new technologies, including recently generative AI has led to the propagation of content and blurred the lines between amateur and professional creativity. As implied in this article, copyright traditionally protects professional creativity and currently acts as a barrier to wider societal creative endeavours. This protectionist approach to the law results in practical challenges where licensing opportunities are often not realistically obtainable, leading to a situation where re-use of copyright-protected materials are somewhat despised. Yet, this type of creativity is

culturally significant and should be supported by the law to some extent. There is no denying that copyright law is about striking a delicate balance between the right-holders' exclusive rights and the rights of users. Historically, this balance has been maintained through ownership,⁹⁹ moderated by exceptions that limit control over a work. However, over the past few decades, there has been a significant expansion of ownership rights, accompanied by a corresponding reduction in the provisions that benefit users.

Locke, in his labour theory,¹⁰⁰ asserts that individuals have a property right to the fruits of their labour, and views any violation of this right as unlawful.¹⁰¹ At the same time, he emphasised the protection of the collective, arguing that any infringement on collective rights through 'disproportionate enclosures of cultural and social portions of the public domain violates the public's property right in its labour'.¹⁰² As Favale argues,¹⁰³ an appropriate interpretation of Locke's theory points to the need of placing a higher interest on the collective's interest rather than the individual. This perspective supports the idea of a remuneration mechanism that protects copyright owners while allowing users and creators to fully benefit from technological advances, meeting Locke's principle of 'no harm'. Effectively, copyright law protects right-owners but this ownership ought to be tempered where necessary to advance collective interests.¹⁰⁴

The ongoing advancement of AI systems in creative domains necessitates mechanisms to ensure that human creativity is adequately rewarded.¹⁰⁵ We argue for the implementation of a royalty fund, which would promote creativity and the dissemination of creative expressions within society.¹⁰⁶ Allowing the use of copyright-protected works in AI training serves the public interest by enhancing productivity and facilitating the exploration of new ideas and forms of expression. In the music sector, where technology has historically been employed to push artistic

(N.D. Cal.); *Concord Music Group, Inc. v Anthropic PBC* No. 3:23-cv-01092 (M.D. Tenn.); *Daily News v Microsoft* No. 1:24-cv-03285 (S.D.N.Y.); *Doe v GitHub, Inc.* No. 4:22-cv-06823 (N.D. Cal.); *Getty Images v Stability AI* No. 1:23-cv-00135 (D. Del.); *Huckabee v Bloomberg* No. 1:23-cv-09152 (S.D.N.Y.); *The Intercept Media and Raw Story Media v OpenAI* Nos. 1:24-cv-01514, 1:24-cv-01515 (S.D.N.Y.); *Kadrey v Meta* No. 3:23-cv-03417 (N.D. Cal.); *Leovy v Google* No. 3:23-cv-3440 (N.D. Cal.); *Nazemian and Dubus v NVIDIA Corporation* Nos. 3:24-cv-01454, 3:24-cv-02655 (N.D. Cal.); *New York Times v Microsoft* No. 1:23-cv-11195 (S.D.N.Y.); *Thomson Reuters v ROSS* No. 1:20-cv-00613 (D. Del.).

⁹³ See above, section I.

⁹⁴ art 9(2) TRIPS.

⁹⁵ Sonya Huang, Pat Grady and GPT-3, 'Generative AI: a creative new world' (*Sequoia*, 19 September 2022) <<https://www.sequoiacap.com/article/generative-ai-a-creative-new-world/>> accessed 17 September 2024.

⁹⁶ eg an artist refused to accept the top prize in a photo competition after winning, citing ethical concerns. <<https://www.artnews.com/art-news/news/ai-generated-image-world-photography-organization-contest-artist-declines-award-1234664549/>> accessed 17 September 2024.

⁹⁷ Zhou and Lee (n 48) 2.

⁹⁸ *ibid* 6.

⁹⁹ Described as conceptually wrong by some scholars, see as example: Wendy J Gordon, 'A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property' (1993) 201 *Yale L. J.* 1533, 1540.

¹⁰⁰ John Locke, 'Two Treatises of Government', Second treatise § 24-50 and specifically on IP, John Locke, *Liberty of the Press* (1695), reprinted in *Locke: Political Essays* (Mark Goldie ed, CUP 1997) 329.

¹⁰¹ Lior Zemer, 'The Making of A New Copyright Lockean' (2006) 29 *Harv. J.L. & Pub. Pol'y* 891, 904; 917-918.

¹⁰² *ibid*.

¹⁰³ Marcella Favale, 'Death and Resurrection Of Copyright Between Law And Technology' (2014) 23 *Information & Communications Technology Law* 117, 120.

¹⁰⁴ Also arguing in favour of IP's social function, see Daniel Gervais, 'Human rights and the philosophical foundations of intellectual property' in Christophe Geiger (ed), *Research handbook on human rights and intellectual property* (Edward Elgar 2015) 89; Christophe Geiger, 'The social function of intellectual property rights, or how ethics can influence the shape and use of IP law' in Graeme B Dinwoodie (ed), *Intellectual property law: methods and perspectives* (Edward Elgar 2013) 153.

¹⁰⁵ Farida Shaheed, 'Copyright policy and the right to science and culture' (2014) Human rights council, twenty-eighth session, A/HRC, para 100 <<https://digitallibrary.un.org/record/792652?ln=en>> accessed 17 September 2024: 'Merely enacting copyright protection is insufficient to satisfy the human right to protection of authorship. States bear a human rights obligation to ensure that copyright regulations are designed to promote creators' ability to earn a livelihood'.

¹⁰⁶ For comparative developments, see *Kneschke v LAION* in Germany where the Regional Court of Hamburg gave some partial guidance regarding whether some acts relevant for AI training can be covered by the German text-and-data mining exception, see Regional Court of Hamburg, judgment of 27 September 2024, Az. 310 O 227/23.

boundaries, creators are likely to embrace AI tools as part of their creative process.¹⁰⁷ This technological integration democratises music creation, making it accessible to a broader audience and enabling non-experts to express themselves through music. Moreover, creators can leverage AI to enhance their workflows, resulting in higher productivity and innovative outcomes.¹⁰⁸

This mechanism is further supported by international copyright provisions. A fundamental principle of the copyright system is encapsulated in the ‘three-step test’, a political compromise articulated in Art. 9(2) of the Berne Convention. This test delineates the scope of copyright exceptions and limitations to ensure that the reproduction right is not rendered meaningless by national legislators.¹⁰⁹ Its underlying objective is to ensure that exceptions to copyright are predictable, do not infringe upon the exclusive rights of right-holders, and protect the legitimate interests of authors. Designed to act as a straight-jacket on the introduction of exceptions and limitations to the reproduction right, this compromise underscores the delicate balance that must be maintained between the rights of right-holders and other societal interests.

One of the complexities with generative AI lies in the application of copyright exceptions. For example, the text and data mining exception is unlikely to interfere with the normal exploitation of copyright-protected works since its purpose diverges significantly from that of enjoying the work in its original form; instead, it transforms music into data. However, arguments by Senftleben support that allowing the use of copyright-protected works for AI training could jeopardise the legitimate interests of authors and right-holders.¹¹⁰ Beyond the economic implications addressed in the second step of the ‘three-step test’, there is a concern that AI-generated outputs mimicking copyright-protected works could disproportionately harm creators by flooding the market. Therefore, while training AI systems on copyright-protected works might be permissible, it should not occur without fair remuneration, given that such use displaces human authorship and music makers’ labour.

Additionally, in the *Shazam* case,¹¹¹ the Intellectual Property Enterprise Court (IPEC) seemingly introduced a pastiche exception distinct from the parody exception within UK copyright law. This exception requires the use to either ‘imitate the style of another work’ or constitute ‘an assemblage (medley) of a number of pre-existing works’ and in both instances, the product must be noticeably different from the original work.¹¹² This provides additional protection for users and providers

of generative AI systems, potentially exempting their use from constituting copyright infringement or necessitating licensing.¹¹³ The pastiche exception requires further scrutiny. Some argue that unifying parody, pastiche, and caricature under a single exception would be more efficient.¹¹⁴ Focusing the assessment of a use on the humorous character interpreted in line with European Court of Human Rights case law and lack of confusion between a use and the original protected work, this approach puts an emphasis the human expression rather than mere stylistic imitation or mashups.

b) Towards a sustainable music sector

A fixed-fee proposal would necessarily diminish the profits accrued by AI services companies, potentially resulting in a reduction of free services and a concurrent increase in subscription fees.¹¹⁵ While this remains speculative,¹¹⁶ it may be an essential consequence to ensure the sustainability of the music sector.¹¹⁷ The advent of generative AI, which facilitates innovative avenues in music creation, simultaneously poses significant risks of displacing creative labour.¹¹⁸ This necessitates a deeper exploration of the implications for authorship within an AI-dominated landscape.

Focusing specifically on the music industry, the ecosystem has undergone substantial transformations over recent years. Although copyright law is ostensibly tech-neutral, the contemporary application of copyright principles emphasises the imperative to reward human creativity, maintain inclusivity, and support the sustainability of creative and cultural industries. Increasingly perceived as content producers,¹¹⁹ the transition from the commercial exploitation of artistic expressions via recordings to the valuation of these recordings as data signifies a paradigm shift. This shift catalyses the redefinition of the creative process from a complex human endeavour to an interaction between neural networks and data. This interaction facilitates the understanding of intricate musical patterns and structures, thereby enabling users to generate new music. It is therefore unsurprising that certain intermediaries such as record labels, have started to define themselves as corporations.¹²⁰ As argued by Negus,¹²¹ these changes in the ecosystem extend beyond reshaping

¹¹³ As argued by Stability in the *Getty Images v Stability AI* in the UK.

¹¹⁴ Sabine Jacques, *The Parody Exception in Copyright Law* (OUP 2019) ch 1.

¹¹⁵ Also noted by Senftleben, ‘Generative AI and Author Remuneration’ (n 22) 1550.

¹¹⁶ Similar concerns were raised in relation to the streaming tax, and this did not immediately lead to an increase in consumer price across services.

¹¹⁷ And perhaps the end of free services is near as these GenAI services are currently experimenting various forms of price discrimination to convince their users to opt for a subscription.

¹¹⁸ See recent research by Gillian Doyle and Sabine Baumann, ‘AI: A cure for Baumol’s disease?’ (2024) CREATE Working Paper 2024/08 <<https://eprints.gla.ac.uk/331601/2/331601.pdf>> accessed 17 September 2024.

¹¹⁹ See on the ‘assembly-line’ character of the culture industry, Max Horkheimer and Theodor W Adorno, *Dialectic of Enlightenment* (Stanford University Press 2002) 132.

¹²⁰ Which gave them a better bargaining power for securing licensing deals over online uses with platforms.

¹²¹ Negus (n 3) 367–84.

¹⁰⁷ M Sun, ‘Paul McCartney says there’s nothing artificial in new Beatles song made using AI’ *The Guardian* (London, 23 June 2023) <<https://www.theguardian.com/music/2023/jun/23/paul-mccartney-says-theres-nothing-artificial-in-new-beatles-song-made-using-ai>> accessed 17 September 2024.

¹⁰⁸ YouTube’s Music AI Incubator, see <<https://blog.youtube/inside-youtube/partnering-with-the-music-industry-on-ai/>> accessed 17 September 2024.

¹⁰⁹ For a comprehensive study of the three-step test, see Martin Senftleben, *Copyright, Limitations and the Three-step test: an analysis of the three-step test in International and EC Copyright Law* (Wolters Kluwer 2004).

¹¹⁰ Senftleben, ‘Generative AI and Author Remuneration’ (n 22) 1544.

¹¹¹ *Shazam v Only Fools The Dining Experience* [2022] EWHC 1379 (IPEC).

¹¹² *ibid* at 181–90.

the commercialisation of music; they are fundamentally altering music dissemination and creation. There is now an imperative to redefine the narrative, ensuring that the value of artistic expression is attributed to human ingenuity rather than being perceived solely through the prism of data.

In the digital age, the significance of material objects containing music has diminished. Historically, the recording industry, centred around the production of physical goods, encountered notable constraints and limitations. The production of vinyl records or CDs was restricted by the availability of materials, equipment, and storage space in warehouses and retail locations. In contrast, digital content is virtually infinite, engendering a shift from scarcity to abundance, encompassing a vast array of music and other creative content.¹²² If generative AI facilitates the autonomous creation of creative content, the purpose of copyright law is called into question. As argued throughout this paper, its focus should be on artistic expression created by humans, irrespective of AI assistance. Without this refocus, platforms will continue to gain prominence, overshadowing the importance of creators.

The transition from music as an artistic expression to music as data underscores concerns regarding the social and artistic value of music, including how it should be rewarded, incentivised, and disseminated within digital networks.¹²³ The AI landscape exacerbates concerns about the exploitation of music, questioning whether the use of protected copyright works for training purposes should entail remuneration and the appropriate form of such remuneration (tax, license, or royalty fund). Despite the corporate structure of the music industry, it is crucial to remember that music is an art form. The digital environment has led to the rise of new intermediaries – keen entrepreneurs who are further removed from the artistic qualities and efforts involved in music creation. For these digital companies, music is often a minor component within the broader digital economy.¹²⁴ Nevertheless, music is exploited as part of data creation, selection, arrangement, analysis, and commercial exploitation. The management of this data for third parties, such as record labels, publishers, and collecting rights societies, becomes crucial. Data generated through the use and distribution of music is then integrated into a system utilised by these new AI actors.

Recognising the social, cultural, and economic value of music requires compensation for the data value of their music. Copyright provides the essential framework to facilitate this new income stream. Given the displacement of labour due to generative AI, ensuring the sustainable future of the music sector is imperative. This is not to suggest that music will cease to be produced. Autonomous systems will continue to generate content resembling existing music, likely in substantial quantities. Human creators will also persist in innovating by experimenting with AI tools and applications although arguably less of them will do so.¹²⁵ Furthermore, AI systems displacing human creative labour

will result in musicians and music companies losing income from music and consequently, stifling creativity. Human creativity will not be central to determining the scope and success of music; instead, data generated from music and commodified will become increasingly paramount.

Despite these significant structural changes, the future of the music industry as an art form relies on how music continues to be created and experienced beyond a reduction of music to mere data. Autonomous content production incurs social and economic costs for human creators. Copyright was introduced to incentivise and reward human creativity by granting exclusive rights to right-holders to control the exploitation of their artistic expressions. The digital environment transformed this paradigm, increasing the value of data derived from music. Collectively, creators are negatively impacted by this technological advancement due to the challenges for copyright law to adapt to this new reality.

The current lack of clear remuneration mechanisms does not benefit creators. Creators, authors, and other workers (including producers, composers, songwriters, musicians and performers) in the music industry are losing income due to the disruption brought by AI systems.¹²⁶ While the difficulties of making a living from music are not new, the speed at which skills are devalued and the diminishing prospect of work are concerning. The situation differs from the 1940s when local musicians were at a disadvantage compared to those in major cities, who played in acoustically superior settings and, as a spill-over effect, disproportionately harmed local productions deemed amateurish. Today, if AI music dominates the market, it might achieve commercial success because AI systems can learn from previous works to establish patterns of potential success or satisfy current mainstream tastes. Yet, since these machines are trained on existing works, their output will resemble already created content. Some music makers might be deterred from creating altogether in the future, dramatically impacting arts and culture, as the human creator remains central to music innovation and evoking emotional responses in an audience.

In an AI landscape, there is a risk that an abundance of content will lead to a loss of diversity, making it harder for human creators to prosper. This phenomenon is not new, as minority tastes have always been marginalised in the music business (e.g., birth of jazz, R&B, blues). Initially, the profits from these markets were minimal compared to popular music. However, these cultural differences reached audiences and became integral to the music business (e.g., jazz became swing; hillbilly became country). A sustainable music market thrives on a diversity of genres, achievable only through a diversity of human actors, not AI systems known for their biases. Human creativity in exploring ideas and refining artistic decisions in music co-created with AI systems may gain importance, but not everyone can fully leverage technology. This AI-royalty

¹²² Eleni-Tatiana Synodinou, 'Time and Access to Copyright-Protected Works in the Digital Age' (2024) 55 IIC 857-63.

¹²³ Making a return to Social Darwinism.

¹²⁴ Negus (n 3) 377.

¹²⁵ Mark Fenwick and Paul Jurcys, 'Originality and the future of copyright in an age of generative AI' (2023) 51 Computer Law and Security Review 105892.

¹²⁶ Not just 'starving artists' to be contrasted with the 'superstar artists' known for raking in streams by the billions and those whose stream counts are so low that they are lucky to perform in a pub. But the current reality also shows a growing 'middle class' artists those who count their streams in the millions, and occupy the space between obscurity and superstardom. See Luminate 2024 Music report <<https://go.luminatedata.com/MzE5LVNBUC0xMDQAAAGUWtXHNMF2A2M2HUG18kK0fz-KJUDvDeQPjHbiEwosn3spG3KwA0P3WG6GRy-nBsLEncsZK9i4=>> accessed 17 September 2024.

fund ensures that human creators can acquire the skills needed to prosper in the digital realm. Furthermore, such a fund could support musical genres more likely to be substituted by AI content or communities more at risk, facilitated by increased transparency requirements imposed on these services and for AI produced content.¹²⁷

As AI exacerbates inequalities within the music sector and is likely to worsen working conditions, the introduction of an AI-royalty fund is further supported by the European Social Charter (ESC),¹²⁸ which complements the European Convention on Human Rights (ECHR) in protecting fundamental civil and political rights.¹²⁹ The ESC is a Council of Europe treaty instrument protecting a range of fundamental social rights, including the right of workers.¹³⁰ This Charter aims to implement the United Nations' Universal Declaration of Human Rights of 1948, which safeguards freedom of expression (Art. 19) and the right to participate freely in cultural life (Art. 27).

Given the dearth of literature on the interrelation between the ESC and copyright law, one might wonder how the ESC relates to copyright law or IP at all. It is important to note that the UK (and EU Member States) are part of a *system* of ESC treaties. Some countries are bound by the original 1961 Charter, others by the 1988 and 1995 Additional Protocols, and some by the Revised Charter. For example, the UK is bound to the 1961 Charter, some countries also adhering to the 1988 Protocol, while others follow the Revised Charter. Among EU countries, only France and Portugal have accepted all the articles of the Revised Charter, whereas the rest have ratified different provisions from either version. Furthermore, only 14 EU Member States have accepted the 1995 Protocol, which introduces a system for collective complaints. These varying levels of commitment among countries create an initial obstacle to achieving a unified approach to the ESC at the EU level, making the proposal of an EU AI-royalty fund perhaps premature.¹³¹

Whilst the lack of uniformity in the levels of protection afforded by the ECS certainly represents a challenge, the rights established by the Charter are guaranteed by EU law, sometimes even explicitly.¹³² Therefore, whilst there is a recognition of the legally binding effect of the ECS on EU law, the current difficulty in furthering the commitment

to social rights at EU level stems from the sovereignty of EU Member States in regards to the Charter's acceptance system.¹³³ In other words, if the UK and other EU Member States are bound by the ECHR and the ESC in the sense that national authorities must respect the rights and freedoms therein in all the cases they adjudicate, for matters of EU law, national judges and EU judges must apply human rights as enshrined in EU law, which implies the application of the EU Charter in compliance with the principle of EU primacy (not applicable to the UK since Brexit). As the legally binding effect of the Charter is the same as with the ECHR,¹³⁴ it is argued that IP and in this case, copyright law, must take social rights into greater account as the ESC rights also have their origin in the Universal Declaration of Human Rights (UDHR),¹³⁵ but also the ESC consolidates long-standing international social and labour standards into a single human rights document, which makes it an important point of reference in discussions about rights and freedoms in the UK.¹³⁶ Within the ambit of the ESC, lies as core value, individual labour rights which include the right to earn a living in an occupation freely entered upon (Art. 1(2)) and fair working conditions as regards to pay and working hours (Arts. 2 and 4). Whilst the European Committee of Social Rights is yet to make a statement on the impact of AI on worker's rights to earn a living and fair remuneration,¹³⁷ the Treaty provides a framework for ESC States Parties (so, including the UK) to support the introduction of remuneration mechanisms irrelevantly from whether copying occurred given the necessity for these AI tools to be trained on copyright-protected works. Against this backdrop, there is a need to ensure that ESC values are protected within this AI revolution, this implies ensuring that there are strong social support systems available to facilitate equitable remuneration, up-skilling/re-skilling and ensuring cultural diversity.¹³⁸

By failing to introduce a remuneration mechanism for AI's use of copyright-protected works and facilitating the displacement of creative human labour, the UK (and other ESC states) arguably does not fulfil its international obligations under the Charter.¹³⁹ The introduction of an AI-royalty fund would manage the impact of AI, minimising disruption to the social and economic fabric of

¹²⁷ As inferred from s 9(3) CDPA. Also, arguing this, see Atila (n 14) 43, 47. The author nevertheless makes an interesting case regarding an opposite interpretation of this provision. It is true that the incentives offered under copyright law favours human authors and could lead to a concealing of the use of AI to attract a longer term of protection or moral rights.

¹²⁸ European Social Charter Turin, 18.X.1961. The ESC's enforcement mechanism is the European Committee of Social Rights. The decisions from this committee do not have immediate binding effect on national legal systems but overtime, this monitoring work has led to legal changes and practices in the countries concerned.

¹²⁹ The UK ratified the 1961 Charter on 11 July 1962 and is therefore bound by its provisions.

¹³⁰ The Council of Europe is the largest and oldest intergovernmental organisation for the protection of human rights in Europe, distinct from the EU although the EU increasingly fulfils a prominent role in ensuring the respect of these values leading to a convergence and interplay between the two legal systems (ECHR/ESC and EU).

¹³¹ For a list of ratifications, see <<https://rm.coe.int/table-of-signatures-and-ratifications-of-the-european-social-charter/16806f399d>> accessed 17 September 2024. Please note that since, Iceland ratified the Revised Charter on 4 July 2024.

¹³² eg art 21 Treaty on the Functioning of the European Union on the freedom of movement of individuals and para 3 on social protection.

¹³³ Resulting in cherry picking. For more, see ECSR, 'The Relationship between European Union Law and the European social Charter' (15 July 2014) <<https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016806544ec>> accessed 17 September 2024.

¹³⁴ To date, the EU still has not accessed the ECHR.

¹³⁵ 'All human rights are universal, indivisible and interdependent and interrelated'. UN Vienna Declaration 1993, at 5 <<https://www.ohchr.org/en/instruments-mechanisms/instruments/vienna-declaration-and-programme-action>> accessed 17 September 2024.

¹³⁶ Colm O'Cinneide, 'The European Social Charter and the UK: why it matters' (2018) 29(2) King's Law Journal 285.

¹³⁷ This does not mean that the Committee is silent on this front, see COE-FRA-ENNHRI-EQUINET Collaborative Platform on Social and Economic Rights (13th meeting on 28 September 2023 in Helsinki) <<https://www.coe.int/en/web/european-social-charter/coe-fra-ennhri-equinnet>> accessed 17 September 2024.

¹³⁸ This was echoed by the latest EU Commission, 'European Employment & Social Rights Forum 2023' (Brussels, 16-17 November 2023).

¹³⁹ As evidenced by O'Cinneide, the UK has repeatedly found as not complying with the ESC by the European Committee on Social Rights. O'Cinneide (n 136) 275.

the music sector by investing in human creators' digital skills and literacy (through up-skilling and/or re-skilling) as supported by Art. 10 ESC.¹⁴⁰ This would create more economically resilient music makers and creators capable of harnessing technology to produce new artistic expressions as well as contributing to a more digitally inclusive society with fairer opportunities for all.¹⁴¹ Finally, it would balance the rights to science and culture, and, freedom of artistic expression (Arts. 19 and 27.1 UDHR, and Art. 15.1 (a) and (b) of the International Covenant on Economic, Social and Cultural Rights (ICESCR)), with the right of creators to benefit from the protection of their moral and economic interests resulting from their creative endeavours (Arts. 27.2 UDHR, and 15.1(c) ICESCR).¹⁴²

c) A workable funding model

Recognising the challenges faced by grassroots venues, artists, and promoters, the Music Venue Trust initiated an industry-wide voluntary contribution system.¹⁴³ Under this system, a portion of the gross revenue from concerts held in arenas and stadiums is automatically allocated to a trust whenever a ticket is purchased. The collected funds are earmarked for redistribution to grassroots venues, artists, and promoters. These funds are managed by designated organisations within the live industry, selected for their representation of sectors of the grassroots ecosystem. Eligible venues, artists, and promoters can apply for funding through these organisations, and the spending of the funds are then monitored and evaluated by the trust. The contribution is intended to be an inherent

component of the live event setup, thus not imposing any additional fees on consumers. Given that these contributions are structured as donations, they are exempt also from taxes and other fees.

The primary advantage of the AI-royalty fund lies in the compelling rationale for recognising AI outputs as necessitating a new revenue stream, as elaborated throughout this paper. Unlike the grassroots contribution model, which depends on voluntary participation, the AI-royalty fund would stem from a legal obligation, presenting a significant material difference. Nevertheless, the grassroots contribution model provides a valuable template for structuring and implementing the AI-royalty fund.

This fund would employ a lump sum remuneration approach applicable to AI service providers. Given that AI outputs typically require high-quality inputs, which often include copyright-protected materials, the proposed model would involve right-holders agreeing to the use of their works during the training phase of an AI system, provided that revenue is generated.¹⁴⁴ The lump sum could be calculated based on prompts and outputs created within the UK using IP addresses or share from subscription fees from UK-based subscribers.¹⁴⁵ For instance, with numerous AI-generated songs daily from services such as Suno and Udio, even a small share of the generated content's value could significantly acknowledge the artistic contribution of music rather than focusing solely on data.¹⁴⁶

This model not only addresses the practical challenges of implementing an input levy but also amplifies the voice of music makers. The administration of the AI-royalty fund could be managed by the Council of Music Makers – which includes The Ivors' Academy, The Featured Artists Coalition, The Music Managers Forum, The Music Producers' Guild, and The Musicians' Union – alongside The Independent Society of Musicians. This collaborative body could establish a trust to manage the fund according to sector-specific needs, taking into consideration heavily substituted/invisible musical genres and supporting talented creators who produce high-quality content but lack the resources to succeed in an algorithm-driven attention economy. As such, the trust could issue direct grants to support music makers from the grassroots up but also facilitates the preservation of jobs as well as introducing measures for more vulnerable categories of music makers.

Importantly, this model would not undermine the copyright system. If an AI output closely resembles an original work and copying can be inferred, the full legal consequences should be applied. Consequently, a licence should be secured from right-holders, and if this is not achieved, right-holders would retain the right to pursue legal action for copyright infringement if copying occurred.

¹⁴⁰ This includes training the music educators on these topical issues as well as facilitating music makers' skills and development programmes and supporting music projects furthering EDI objectives given the difficulties for music makers to be seen in the current digital landscape (aka 'artist break through'). For more, see section II.3.c).

¹⁴¹ So far, social rights occupy a marginalised place in the AI policy debate. Jędrzej Niklas and Lina Dencik, 'What rights matter? Examining the place of social rights in the EU's artificial intelligence policy debate' (2021) 10(3) Internet Policy Review <<https://doi.org/10.14763/2021.3.1579>> accessed 17 September 2024. Arguing for a more prominent role of the Charter in the UK, see O'Conneide (n 136) 275-96.

¹⁴² The interplay between human rights and IP is now well-established. See Jonathan Griffiths and Luke McDonagh, 'Fundamental rights and European IP law – the case of art 17(2) of the EU Charter' in Christophe Geiger (ed), *Constructing European Intellectual Property Achievements and New Perspectives* (Edward Elgar 2013) 75-93; Christophe Geiger and Elena Izyumenko, 'The constitutionalization of intellectual property law in the EU and the Funke Medien, Pelham and Spiegel Online decisions of the CJEU: progress, but still some way to go!' (2020) 51(3) IIC 282; Christophe Geiger and Elena Izyumenko, 'Intellectual Property before the European Court of Human Rights' in Christophe Geiger, Craig Allen Nard and Xavier Seuba (eds), *Intellectual property and the judiciary* (Edward Elgar 2018) 9; Griffiths and McDonagh (this note) 75; Martin Senftleben, João Pedro Quintais and Arlette Meiring, 'How the EU Outsources the Task of Human Rights Protection to Platforms and Users: The Case of UGC Monetization' (2023) 38(3) Berkeley Technology Law Journal 933; P Bernt Hugenholtz, 'Copyright and freedom of expression in Europe' in Rochelle Cooper Dreyfuss, Diane Leenheer Zimmerman and Harry First (eds), *Expanding the boundaries of intellectual property* (OUP 2001) 343; Jonathan Griffiths, 'Taking power tools to the acquis – the Court of Justice, the Charter of Fundamental Rights and European Union copyright law' in Christophe Geiger, Craig Allen Nard, Xavier Seuba (eds), *Intellectual property and the judiciary*. (Edward Elgar 2018) 144; Jacques (n 114) ch 5. Specifically, on GenAI and human rights, see Christophe Geiger, 'Elaborating a Human Rights-Friendly Copyright Framework for Generative AI' (2024) 55 IIC 1129-165; P Bernt Hugenholtz and others, 'Trends and developments in artificial intelligence – challenges to the intellectual property rights framework – Final report. Publications Office of the European Union' (2020) EU Commission Report 67 <<https://doi.org/10.2759/683128>> accessed 17 September 2024.

¹⁴³ House of Commons, 'Grassroots music venues' (Seventh Report of Session 2023-24, HC 527) <[Grassroots music venues \(parliament.uk\)](https://www.parliament.uk)> accessed 17 September 2024.

¹⁴⁴ Thereby ensuring that ECR rights are not only protected in theory but in fact, in compliance with International Commission of Jurists v Portugal, Collective Complaint No 1/1998.

¹⁴⁵ Similar to the developments regarding streaming services.

¹⁴⁶ It may be reasonable to introduce this model for AI services of certain size to ensure that start-ups can innovate and lead to more competition amongst AI service providers.

In summary, the proposed AI-royalty fund model would complement existing industry initiatives by ensuring that both live performances and music makers are supported. It would facilitate the training of AI systems on quality materials, enhance the representation of music makers in these policy debates, and reaffirm the value of music as an artistic expression.

IV. Conclusion

In 2022, the United Kingdom's music industry contributed GBP 6.7 billion in gross value added to the national economy.¹⁴⁷ To ensure its sustainability and promote inclusivity, this article advocates for a copyright framework that protects human creativity, urging legislative intervention at the stage of AI-generated output by establishing an AI-royalty fund. The advent of generative AI has shifted the value of music towards its profitability as data, rather than its intrinsic artistic worth. This transformation raises questions regarding the longevity of musical compositions and the adequate compensation mechanisms for creators and musicians.

AI systems undeniably enhance societal value and augment the creative toolkit available to human creators, facilitating further innovation and the dissemination of artistic expressions. However, it is crucial to acknowledge that the efficacy of these AI systems is contingent upon the high-quality materials from which they learn,

materials that predominantly stem from human creativity. There exists no justifiable rationale for exempting these AI systems from adhering to copyright principles. Consequently, the establishment of a fair remuneration mechanism for human creators is imperative. Such a mechanism would ensure that the financial benefits derived from AI-generated works are equitably distributed, thereby preserving the economic viability of human creativity and maintaining the cultural richness that it brings to society.

The economic and social potentials of AI tools and applications are undeniably significant, forming an integral part of contemporary societal reality. However, the displacement of human creators by AI on a large scale highlights the paradox of innovation: while it can advance technology, it can simultaneously undermine the livelihoods of human creators and diminish the cultural diversity of works available to the public. This article posits that copyright law cannot overlook the social issues engendered by the emergence of generative AI nor the existence of the ESC. It is not suggested that copyright should serve as a financial safety net for unsuccessful authors, but rather that legislators must address the adverse implications of technological advancements. Specifically, within the creative industries, this can be achieved through the implementation of an AI-royalty fund ensuring the sustainability of the UK music sectors and facilitate the development of the digital sector.

¹⁴⁷ Daniel Tencer, 'As Suno and Udio admit training AI with unlicensed music, record industry says: 'There's nothing fair about stealing an artist's life's work.' (*Music Business Worldwide*, 5 August 2024) <<https://www.musicbusinessworldwide.com/as-suno-and-udio-admit-training-ai-with-unlicensed-music-record-industry-says-theres-nothing-fair-about-stealing-an-artists-lifes-work/>> accessed 17 September 2024.