Xiyin Tang
Michael Karanicolas
Tyler Emeney
Yan Sun
Nathan Siegel
Nicholas Wilson

U.S. COPYRIGHT OFFICE
WASHINGTON, D.C.

Artificial Intelligence and Copyright

Docket No.: 2023-6

INITIAL COMMENTS
IN RESPONSE TO AUGUST 30, 2023 NOTICE OF INQUIRY
AND REQUEST FOR COMMENTS

I. INTRODUCTION

We submit these comments in response to the Copyright Office's Notice of Inquiry

("NOI") in the above-captioned study on artificial intelligence ("AI") and copyright. AI is,

undoubtedly, poised to revolutionize how companies and individuals generate creative works.

And while the technology has undoubtedly flourished under a current legal regime that has, to

date, refused to grant protection to AI-generated works, the potential propertization of such

works presents serious concerns for the progress of knowledge—for the ability of others to build

off of, comment on, and disseminate works, while also threatening the livelihoods of hundreds of

thousands of authors who rely on the protections of the copyright system.

In this comment, we argue that revisions to the Copyright Act should be made to clarify that AI-generated works are unprotectable by copyright, a subject that, clearly, was not contemplated by Congress when it passed the Copyright Act of 1976.[1] Nor is there any sound policy basis for providing such protection.[2] Indeed, as we discuss below, the astonishing progress we have seen in the past year alone—the wealth of AI-generated works shared on the Internet, the rapid development of large language models—notwithstanding courts and the Copyright Office's repeated denials of copyright protection to AI-generated works, confirms that no protection is necessary.[3]

II. REVISIONS TO THE COPYRIGHT ACT ARE NECESSARY TO CLARIFY THE HUMAN AUTHORSHIP REQUIREMENT

a. The Legislative Text and History of the Copyright Acts Do Not Explicitly Provide for Human Authorship

Nothing in the explicit statutory text of the Copyright Act (the "Act") provides that authors must be human.[4] This is unsurprising: after all, until recently, only humans were capable of creating works at all. As discussed in this Part, the existence of the work-for-hire doctrine—which allows nonhuman corporations to be considered the author of copyrighted works—casts doubt on interpreting the Copyright Act to stand for human-only authorship.

---

[1] This responds to Question 19 of the NOI, which provides: Are any revisions to the Copyright Act necessary to clarify the human authorship requirement or to provide additional standards to determine when content including AI-generated material is subject to copyright protection?

[2] This responds to Question 20 of the NOI, which provides, in part: Is legal protection for AI-generated material desirable as a policy matter?

[3] This responds to Questions 20 and 21 of the NOI. The former provides, in part: Is legal protection for AI-generated material necessary to encourage development of generative AI technologies and systems? Does existing copyright protection for computer code that operates a generative AI system provide sufficient incentives? The latter provides, in part: Would [copyright] protection "promote the progress of science and useful arts"?

[4] *See* 17 U.S.C. § 101 *et seq.* (not including "human" or similar language); *see also Urantia Found. v. Maaherra*, 114 F.3d 955, 958 (9th Cir. 1997) ("the copyright laws, of course, do not expressly require 'human' authorship, and considerable controversy has arisen in recent years over the copyrightability of computer-generated works").

1. The Work-for-Hire Provision Complicates Attempts to Limit Copyright Protection to Human Authors

The Copyright Act of 1909 was the first Copyright Act to provide for employer authorship,[5] stating: "the word 'author' shall include the employer in the case of works made for hire."[6] This was a change from prior laws which had said the employer was the "proprietor" of the work,[7] and which had used human-specific language for authors.[8]

The legislative history behind this change is sparse. The House Report on the 1909 Act does not comment on this change beyond a single sentence: "[This section] places an interpretation and construction upon the use of certain words."[9] Moreover, the clause about employer authorship was buried at the end of a section otherwise devoted to "the date of publication" definition,[10] and seemed to contradict other language in the Act that said only a "person" may obtain a copyright.[11]

The 1976 Act, like the 1909 Act, provides for corporate authorship, stating that "[i]n the case of a work made for hire, the employer or other person for whom the work was prepared is considered the author."[12] As with the 1909 Act, there is little legislative history to explicate this

---

[5] 2 Patry on Copyright § 3:19.
[6] 17 U.S.C.A. § 26 (1909, repealed 1978); Act of Mar. 4, 1909, Pub. L. No. 60-349, 60th Cong., 2d Sess., 35 Stat. 1075, 1088 § 62.
[7] 2 Patry on Copyright § 3:19.
[8] For example, the 1970 Copyright Act protected copyrights for authors, provided they were "a citizen or citizens [of the United States], or resident within the same," and contemplated that these authors would be "living" beings. Copyright Act of 1790, § 1.
[9] H.R. REP. No. 2222, 60th Cong., 2d Sess. (1909) at 14.
[10] Act of Mar. 4, 1909, Pub. L. No. 60-349, 60th Cong., 2d Sess., 35 Stat. 1075, 1088 § 62.
[11] Act of Mar. 4, 1909, ch. 320, § 9, 35 Stat. 1075, 1077 ("That any *person* entitled thereto by this Act may secure copyright for his work") (emphasis added); *supra* at ch. 320 ("That any *person* entitled thereto, upon complying with the provisions of this Act, shall have the exclusive right: [list of rights constituting copyright]") (emphasis added). The records of the conferences leading to the 1909 Act are not definitive either. Some speakers at the conferences talk about a proprietor – such as an employer – applying for and taking out copyrights "by the fiction of the law that he is the author." *See* LEGISLATIVE HISTORY OF THE 1909 COPYRIGHT ACT 55 (E. Fulton Brylawski & Abe Goldman eds. 1976). These remarks seem to be continuing the pre-1909 understanding that the author is the employee, and the employer is simply a proprietor who gets the copyright by default.
[12] 17 U.S.C. § 201(b).

provision. According to the Congressional Report accompanying the 1976 Act, "Section 201(b) adopts one of the basic principles of the present law: that in the case of works made for hire the employer is considered the author of the work, and is regarded as the initial owner of copyright unless there has been an agreement otherwise."[13]

The Congressional Report also explicitly contemplates that the author may not be an individual, stating that in the case of anonymous works, pseudonymous works, and works made for hire, "[c]omputing the term from the author's death…requires special provisions to deal with cases where…the 'author' is not an individual."[14]

2. Taken Together, the Copyright Acts of 1909 and 1976 Leave Human Authorship Ambiguous

Proponents of AI authorship could argue that the 1909 Act explicitly established that employers, including nonhuman corporate entities, can be authors. And Congress's recognition that authors could not be individuals in the Report accompanying the 1976 Act shows they had contemplated, at the very least, nonhuman authorship by corporate employers.[15] Because the current law allows corporations to be authors, the argument might go, there is likewise no reason why an AI-authored work—especially if generated by a corporation employing AI—should not be copyrightable.[16]

To be sure, proponents of human-only authorship have a few interpretive approaches that counter or limit this argument. The Copyright Office's approach seems to be treating work-for-hire as a sui generis exception to the general presumption surrounding human authorship.[17]

---

[13] H.R. Rep. No. 94-1476, at 121 (1976).

[14] H.R. Rep. No. 94-1476, at 137 (1976).

[15] *See* sources cited *supra* note 11.

[16] *See, e.g.*, Annemarie Bridy, *Coding Creativity: Copyright and the Artificially Intelligent Author*, 2012 Stan. Tech. L. Rev. 5, 69 (2012) (arguing that AI authorship can be assimilated into the work-for-hire doctrine).

[17] *See, e.g.*, *Works Made for Hire, United States Copyright Office*, https://www.copyright.gov/circs/circ30.pdf. ("Ordinarily, the author is the person or persons who actually created the work you intend to register. 'Works made for hire' are an exception to this rule.")

Another approach is to focus on the words "*considered* the author" in the 1976 Act.[18]

Considering a corporation to be an author is not the same as saying a corporation *is* the author, especially when the provision appears in the context of "Ownership of copyright."[19] Rather, the 1976 Act simply means that copyrights vest (but are not authored by) employers, even though the authors are their human employees; that is, it meant to continue the pre-1909 author/proprietor distinction. The 1976 Act's legislative history, just like its text, likewise stated that the "employer *is considered* the author of the work," rather than "employer *is* the author of the work."[20] Nonetheless, this argument has an uphill battle considering the 1909 Act's language explicitly defining "author" to "include the employer," and the 1976 Act's continuation of that language.

Ultimately, while there are arguments that Congress intended for authors to be human only, these arguments are not guaranteed to hold up in every court that considers AI authorship. A human-only authorship requirement remains uncertain.

b. The Uncertainty of Human Authorship Has Led to Arguments that Work-for-Hire Should Include AI-Created Works

The existence of the work-for-hire doctrine has led scholars to argue that AI can be explicitly rolled into the work-for-hire requirement.

Proponents of AI authorship point to the work-for-hire regime as not only evidence that AI-created works should be copyrightable, but as a potential doctrine to absorb AI copyright.[21] Scholars argue that the work-for-hire doctrine allows entities who "were responsible for causing

---

[18] 17 U.S.C. § 201 (emphasis added).
[19] *Id.*; *see also* Defendant's Response to Plaintiff's Motion for Summary Judgment and Cross Motion for Summary Judgment at 22, *Thaler v. Perlmutter*, No. CV 22-1564 (BAH) (D.D.C. Aug. 18, 2023), 2023 WL 2889578 (making a similar argument interpreting "*considered* the author").
[20] H.R. Rep. No. 94-1476, at 121 (1976).
[21] *See* Bridy, *supra* note 16.

a creative work to be brought into the world, although they might not have been directly involved in the creative effect" to maintain a copyright in the work.[22] In describing the rationale behind the work-for-hire doctrine's circumvention of the author-in-fact to provide rights to another party, treatise author William Patry stated that "[t]he public has no inherent interest in who owns the copyright so long as works are placed into the marketplace."[23] Scholars have thus argued that "[a] person who can be viewed as 'the motivating factor in producing' or the 'originator' of a computer-generated work is thus well within the constitutional dimensions of the concept of 'author.'"[24] Some scholars have even taken this concept so far as to argue that AI authorship can be assimilated into the work-for-hire doctrine through the legal fiction that generative software acts as the "employee" of its coder.[25]

c. While The Copyright Office and Case Law Require Human Authorship, It is Not Clear That Other Courts Will Agree

The most explicit human authorship requirement has come from the Copyright Office itself and from lower court decisions; however, these sources of authority will not bind future interpretations of the authorship requirement.

The Copyright Office has repeatedly indicated that, outside of work-for-hire, authors must be human. The Compendium of Copyright Practices has required this since 1973.[26] And the

---

[22] Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. Pitt. L. Rev. 1185, 1203 (1986).

[23] 2 William F. Patry, *Patry on Copyright* § 3:19 note 90 (2016).

[24] Robert C. Denicola, *Ex Machina: Copyright Protection for Computer-Generated Works*, 69 Rutgers U.L. Rev. 251, 277 (2016).

[25] Bridy, *supra* note 16, at 69.

[26] Copyright Office, Compendium of U.S. Copyright Office Practices, First Edition, revised at 2.8.3(I)(a)(1)(b) (1973), https://www.copyright.gov/history/comp/compendium-one.pdf (pictorial or graphical works are not copyrightable if they "do not owe their origin to a human agent"). The current requirement is at § 306. Copyright Office, Compendium of U.S. Copyright Office Practices § 306 (2021), https://www.copyright.gov/comp3/chap300/ch300-copyrightable-authorship.pdf (citing *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884)).

Copyright Office has recognized the human authorship requirement in the face of machine-created works as early as 1965, in an annual report.[27]

Likewise, some courts have held that a copyrightable work must be created by a human author.[28] Most on point, in *Thaler v. Perlmutter*, the court affirmed that human authorship is "an essential part of a valid copyright claim" where a plaintiff sought to register a computer-created work of visual art for protection.[29] In coming to this decision, the court first analyzed the text of the Copyright Act of 1976, which provides copyright protection to "original works of authorship fixed in any tangible medium of expression."[30] Although "author" is not defined in the Copyright Act itself, dictionaries define the term along the lines of an originator with the capacity for intellectual, creative, or artistic labor.[31] The court found that such an originator must be a human being.[32] Note that in *Thaler*, the plaintiff argued that the AI-generated work should be considered a work-for-hire. One potential roadmap for future courts would be to hold as the *Thaler* court did, which was that because the work itself was not created by a human author, no valid copyright interest in the work ever existed to render the work as a work-for-hire.[33] But it is certainly not guaranteed that subsequent courts will follow *Thaler* in its reasoning—or even that the district court's holding will stand on appeal.[34]

---

[27] Copyright Office, *Sixty-Eighth Annual Report of the Register of Copyrights for the Fiscal year Ending June 30, 1965*, 5 (1965), https://www.copyright.gov/reports/annual/archive/ar-1965.pdf.

[28] *Naruto v. Slater*, 888 F. 3d 418, 420 (9th Cir. 2018) (denying copyright protection to a work authored by a monkey).

[29] *Thaler v. Perlmutter*, No. CV 22-1564 (BAH), 2023 WL 5333236, at *5 (D.D.C. Aug. 18, 2023).

[30] *Id.* at *4 (citing 17 U.S.C. § 102(a)).

[31] *Id.* (citing *Author*, MERRIAM-WEBSTER UNABRIDGED DICTIONARY, https://unabridged.merriam-webster.com/unabridged/author (last visited Aug. 18, 2023); *Author*, OXFORD ENGLISH DICTIONARY, https://www.oed.com/dictionary/author_n (last visited Aug. 10, 2023)).

[32] *Id.*

[33] *Thaler*, 2023 WL 5333236, at *6 ("The work-for-hire provisions of the Copyright Act, too, presuppose that an interest exists to be claimed.")

[34] The plaintiff has appealed in *Thaler*. *See* Not. of Appeal, *Thaler v. Perlmutter*, No. CV 22-1564 (BAH) (D.D.C. Oct. 11, 2023).

Thus, revisions to the Copyright Act should be made to clarify that works generated by AI are not subject to copyright protection. This means we do not believe any amount of human intervention on the front end—such as prompt engineering or selecting what material the AI model is trained on—should render a work copyrightable. Prompt engineering or selection of training material does not alter the fundamental fact that the output will still have originated from a machine, rather than a human.[35] On the other hand, we leave open the possibility that in some cases, significant human intervention to the work-as-generated (the output), such as large-scale transformation through extensive human editing and additional authorship, may render the non-copyrightable work subject to copyright protection.

III. THERE IS NO SOUND POLICY BASIS FOR PROVIDING LEGAL PROTECTION TO AI-GENERATED MATERIAL

The U.S. copyright system primarily operates under a utilitarian approach, under which copyright exists as a means to incentivize the creation of works that benefit society.

An important question in determining whether to grant copyrightability to AI created works is how society would benefit from copyright protection, as opposed to the benefits that would come from keeping the works in the public domain. Many argue that granting copyright in AI created works will be good for the AI industry, but that does not mean that it is good for society as a whole. Indeed, keeping these works in the public domain serves to expand the wealth of works in the public domain, available for all to build upon. Allowing one user, who has expended very little effort in prompting a machine to generate an output, the monopoly of copyright protection in that work would severely hinder common creativity, and the ability of others to build off of, comment upon, disseminate, and engage with the work.

---

[35] See, e.g., Letter from Suzanne V. Wilson, Copyright Office Review Bd., to Tamara Pester, Esq. (Sept. 5, 2023), https://www.copyright.gov/rulings-filings/review-board/docs/Theatre-Dopera-Spatial.pdf [https://perma.cc/Y52T-BCFC] (affirming the Board's refusal to register the copyright).

Another social concern of granting copyright in AI works is the risk of "exacerbating the inequality of social wealth."[36] The value in an AI comes from its algorithm, and more data leads to a stronger algorithm.[37] This likely means that a small number of players with access to the most data will develop the most advanced AI, and as a result will be able to produce the most commercially successful products, leading to even more substantial inequality in the industries surrounding creative works than already exists.[38] This threatens "commercialization, concentration, and homogenization of information."[39]

A third potential concern is that allowing copyright in AI created works may disincentivize human authors from creating.[40] AI can create less expensive, quicker and more targeted works of art than humans, which in the short term may be perceived as providing more value.[41] However, in the long term, the saturation of AI-made works will make the market more homogenous and could also "reduce diversity and turn creative works into commodities."[42]

Finally, as courts considering this issue have noted, copyright protection originated as a property right protection which could incentivize individuals to create and invent.[43] "Non-human actors need no incentivization with the promise of exclusive rights under United States law, and copyright was therefore not designed to reach them."[44]

---

[36] Xiao Wang, *Ai Output: A Human Condition That Should Not Be Protected Now, or Maybe Ever*, 20 Chi.-Kent J. Intell. Prop. 136, 164 (2021). See also Tim W. Dornis, *Artificial Creativity: Emergent Works and the Void in Current Copyright Doctrine*, 22 Yale J. L. & Tech. 1, 41 (2020).
[37] *Id.*
[38] *Id.*
[39] Patrick Zurth, *Artificial Creativity? A Case Against Copyright Protection for Ai-Generated Works*, UCLA J.L. & Tech., Spring 2021, at I, 15.
[40] *Id.* at 16.
[41] *Id.*
[42] *Id.*
[43] *Thaler*, 2023 WL 5333236, at *4 (citing Act of Mar. 4, 1909, ch. 320, §§ 9, 10, 35 Stat. 1075, 1077).
[44] *Id.*

IV. NOR IS LEGAL PROTECTION NECESSARY TO ENCOURAGE DEVELOPMENT OF GENERATIVE AI TECHNOLOGIES AND SYSTEMS OR PROMOTE THE PROGRESS OF SCIENCE

The Constitution's copyright clause provides that Congress may grant copyright protection for purposes of "promot[ing] the Progress of Science."[45] However, this clause does not claim that the creation of *all* works of art needs copyright as an incentive—only that Congress *may* use copyright as a way to incentivize the creation of art. Congress has decided that this incentive is necessary for human authorship, but in deciding whether works created by artificial intelligence should be eligible for copyright protection, it is important to question whether protection is necessary to promote artistic progress.

There are already incentives for the creation and development of AI technology through patent and copyright protection in the machinery and software, so the developers of AI have been sufficiently incentivized to create and improve their programs.[46] The artificial intelligence itself needs no incentive, as it is programmed to create, and needs only human prompting to generate works.

The only other party that could need the incentive of copyright would be the users of AI systems. However, creation of works using AI technology requires substantially less time and effort than most human created works. Humans receive copyright protection for their works to balance against the cost of creating those works, and the risk in investing so much time and resources only for another party to copy the finished product.[47] With AI-created works, "both the

---

[45] U.S. Const. art. I, §8, cl. 8.

[46] Jane C. Ginsburg & Luke Ali Budiardjo, *Authors and Machines*, 34 Berkeley Tech. L.J. 343, 448 (2019).

[47] *See* Robert Yu, *The Machine Author: What Level of Copyright Protection Is Appropriate for Fully Independent Computer-Generated Works?*, 165 U. Pa. L. Rev. 1245, 1248 (2017)

fixed and variable costs of producing each copyrightable article are effectively zero, which allows producers to compete with imitators even absent legal protection."[48]

The proof is in the pudding. The fact that courts, and the Copyright Office, have repeatedly struck down attempts to protect AI-generated works have done little to stop the, by all accounts, astronomical growth of AI in the past year alone.[49] Individual users have generated enormous swaths of uncopyrightable content in a short period of time.[50] Large content studios, notwithstanding the state of current legal authority that denies protection to AI-generated works, have nonetheless made it clear that intend to continue using the technology to help with the creation of content.[51] Other firms are building out personalized large language models that are trained solely on the content that they own.[52] The enormous progress made in AI in the past year alone, absent any legal protection for outputs, speaks for itself.

When balancing any alleged need for protection against the negative effects of monopolization,[53] it is clear that granting copyright in AI-generated works does not align with the constitutional goals of the copyright clause.

---

[48] *Id*. at 1249.

[49] *See generally* Matthew Sag, *Copyright Safety for Generative AI*, 61 Houston L. Rev. 101, 104-105 (2023).

[50] *See e.g.* David Pogue, *Art Created by Artificial Intelligence: "Frightening and fascinating all at the same time"*, CBS News (Jan. 15, 2023), https://www.cbsnews.com/news/ai-art-created-by-artificial-intelligence/.

[51] *See Summary of the 2023 WGA MBA*, WGA CONTRACT 2023 (2023), https://www.wgacontract2023.org/the-campaign/summary-of-the-2023-wga-mba (ratified minimum bargaining agreement for TV/film writers clearly contemplating the use of AI by providing for the *disclosure* by studios "if any materials given to the writer have been generated by AI or incorporate AI-generated material").

[52] *See* Ben Kosma, *Which Companies Are Working on LLMs and ChatGPT Alternatives?*, TECH MONITOR (July 27, 2023).

[53] *Supra* Part III.

October 30, 2023

Respectfully Submitted,

Xiyin Tang
Professor of Law
UCLA School of Law

Michael Karanicolas
Executive Director
UCLA Institute for Technology, Law & Policy

Tyler Emeney
Research Assistant
UCLA Institute for Technology, Law & Policy

Yan Sun
Research Assistant
UCLA Institute for Technology, Law & Policy

Nathan Siegel
Research Assistant
UCLA Institute for Technology, Law & Policy

Nicholas Wilson
Research Assistant
UCLA Institute for Technology, Law & Policy