

IS THE PEN MIGHTIER THAN THE KEYBOARD?: HUMAN
AUTHORSHIP AND ARTIFICIAL INTELLIGENCE IN A POST-LOPER
BRIGHT COURTROOM

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INTRODUCTION: AUTHORS, ART, AND THE PROTECTION OF CREATIVITY

Imagine an author. Imagine the kinds of work they may be creating. Are they holding a paintbrush? Sitting in front of a typewriter? Or perhaps positioned behind the lens of a camera? Regardless of the attire, medium, or accompanying artistic production, it is undoubtedly certain that the author being imagined is a human. Their creativity flows from their brain and informs their hands how to move, their fingers how to type, or their body how to move on a stage; their work communicates the human experience.

In the early twentieth century, Diego Rivera painted historical murals that influenced and communicated a desire for freedom for the Mexican people.¹ In 2023, Greta Gerwig directed *Barbie*, a film that, through a monologue by America Ferrera, conveyed the universal female experience.² Though both of these authors undoubtedly experienced and communicated vastly different messages, their position as artists establishes a key theme: for centuries, authors and their art have shaped the way humans interact and perceive the world.

Art is a cornerstone for culture, politics, socio-economic issues, and the human experience. So too are the media with which they are produced. What used to be sketches or murals of scenes from war are now motion pictures displayed on screens of all sizes.³ What used to be words hand-inked onto a page are now voices of the authors shared through headphones and car stereos.⁴ However, just as the communication of human experience remains a throughline of the ever-changing landscape of artistic media, so too does

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¹ See, e.g., Diego Rivera, *Epopeya del Pueblo Mexicano* (fresco mural 1929–35) (on file with the Palacio Nacional del México).

² *BARBIE*, HBO Max (Warner Bros. Pictures 2023).

³ See, e.g., *AMERICAN SNIPER*, DVD (Warner Bros. Pictures 2014) (demonstrating an example of a modern war depicted through a motion picture film).

⁴ See, e.g., *BETWEEN THE COVERS: CONVERSATIONS WITH WRITERS IN FICTION, NONFICTION & POETRY*: *Robin Coste Lewis: Archive of Desire* (Spotify, Nov. 4, 2025) (demonstrating an example of a podcast episode in which the viewers can listen to the voice of their favorite author).

an author's desire for protection of their works.

The evolving, readily accessible landscape of artistic media has forced the United States (U.S.) Copyright Office (the Office) to continuously shift and change its definition of what an author of a creative work can be and what media they can use as tools for their authorship.⁵ Currently, the Office does not recognize works created with the assistance of prompt-based Artificial Intelligence (AI) as being protected, copyrightable works.⁶ Given that the world of AI is fairly new to the artistic scene, the question of authorship and AI is novel to the Office and the courts.⁷

This Note argues that the Office needs a drastic reevaluation of its policies regulating works created with AI. Specifically, this Note argues that AI should be included as a tool to promote authorship and accessibility within the overlap of art and copyright. Part I will provide background on Copyright Law, the human authorship requirement for copyright protection, AI, the Office's current regulatory guidelines for registering works containing elements of AI, and recent case law involving AI and copyright protection. Further, this part will provide a brief overview of the seminal case *Loper Bright Enterprises v. Raimondo*⁸ and provide an analysis of how the overturning of the *Chevron* deference doctrine will affect decisions and opinions from the Office.

Part II of this Note will analyze the addition of AI as a machine/device/tool to human authorship, and it will provide three different standards that could be used (or are already in use) by the Office to evaluate works containing elements of AI. This part will also address the issue of deference post-*Loper Bright* and assess the advantages and disadvantages of giving the Office deference for statutory refusals of works.

Part III will outline the proposed resolution in the form of regulatory guidelines for both the Office and the court system. This Note will list its proposed solution to this issue through three intertwined suggestions, all of which depend on each other. The solutions include: 1) A proposed revision of the Copyright Compendium to explicitly include Artificial Intelligence as a machine, device, and/or tool to human authorship; 2) A proposed revision of the standard used to evaluate the statutory requirement of authorship, specifically regarding works made using Artificial Intelligence; and 3) A proposal that the Office be given significant administrative deference when

⁵ U.S. COPYRIGHT OFF., COPYRIGHT AND ARTIFICIAL INTELLIGENCE: PART 2: COPYRIGHTABILITY (2025) [hereinafter REPORT PART 2], <https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-2-Copyrightability-Report.pdf> [<https://perma.cc/Y4WT-CVPQ>] (discussing the Copyright Office's AI initiative).

⁶ See *id.* at 3; see also *Naruto v. Slater*, 888 F.3d 418, 426 (9th Cir. 2018) (holding that only a human can be an author of a copyrightable work).

⁷ See REPORT PART 2, *supra* note 5, at Preface (stating the Office's initiative to explore the intersection of copyright and artificial intelligence began in early 2023).

⁸ *Loper Bright Enters. v. Raimondo*, 144 S. Ct. 2244 (2024).

interpreting the scope of the statutory elements needed for a work to be eligible for protection.

I. BACKGROUND: PAST REGULATIONS AND THEIR ADAPTABILITY TO CURRENT REALITIES

This part will introduce the constitutional powers vested in the Office, the creation of the Office's executive agency power, and the current controlling copyright law as it relates to the human authorship requirement. Further, it will discuss the current landscape of agency deference and the current intersections and commentaries on copyright law and AI.

A. *Controlling Law, Copyright Protection, and the Opportunity for Change*

1. Congressional Power and the Evolution of the Copyright Act

Copyright law grants artists, musicians, novelists, and any other subset of authors a set of exclusive rights in their original creative works.⁹ These rights include the right to make derivatives, to publicly display or perform such works, and the right to license and distribute these works to others.¹⁰ These protections are not only critical to the author but also critical to the economic standing of the United States.¹¹

The U.S. Patent and Trademark Office (USPTO) found in a study that copyright-intensive industries contributed \$1.29 trillion to the U.S.'s gross domestic product and employed close to 6.6 million people in 2019.¹² The protection of such culturally, artistically, and economically beneficial works is rooted in the history of the United States, and their importance harkens back to the Founding Fathers.¹³ Comparable to the importance of giving Congress the power to lay and collect taxes, the founders recognized the importance of promoting and protecting the progress of science and useful arts.¹⁴

⁹ 17 U.S.C. § 102; *see* 17 U.S.C. § 101.

¹⁰ 17 U.S.C. § 106.

¹¹ *See generally* ANDREW A. TOOLE, RICHARD D. MILLER & NICHOLAS RADA, U.S. Patent and Trademark Off., *INTELLECTUAL PROPERTY AND THE U.S. ECONOMY: THIRD EDITION* (2022), <https://www.uspto.gov/sites/default/files/documents/uspto-ip-us-economy-third-edition.pdf> [<https://perma.cc/VRA5-DH5T>] (discussing the economic and employment impact of IP-intensive industries in the U.S.).

¹² *See id.* at 3.

¹³ *See Overview*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/about/> [<https://perma.cc/5QK2-4929>] (last visited Feb. 16, 2025).

¹⁴ *See What Is the Purpose of Copyright Law*, COPYRIGHT ALL., <https://copyrightalliance.org/education/copyright-law-explained/copyright-basics/purpose-of-copyright/> [<https://perma.cc/B3L6-L4CX>] (last visited Jan. 27, 2026); *U.S. Copyright Beginnings*, U.S. COPYRIGHT

Though the framers may not have been able to predict the importance of such sciences and useful arts, either culturally or economically, they understood the necessity for protecting intellectual property.¹⁵ In knowing that society benefits and flourishes through avenues of creativity and originality, the framers included the Intellectual Property Clause in the Constitution.¹⁶

Specifically, the Intellectual Property Clause endows Congress with the power to “promote the progress of science and useful arts, by securing for limited times to author...the exclusive right to their respective writings.”¹⁷ Following this clause, Congress enacted the first copyright law—the Copyright Act of 1790.¹⁸ Though this law had a much narrower scope than current copyright law—namely, only protecting books, maps, and charts for fourteen years with a renewal option—this Act laid the foundation of legislative intent for future copyright by encouraging the production of original works from authors, scientists, artists, musicians, and other creators, with a promise of economic and creative protection.¹⁹

Following the Copyright Act of 1790, several important revisions were made over the next century, namely in 1831, 1870, and 1909, which greatly contoured the boundaries and definitions of works that were eligible for protection, the duration of protection, the process for registering a work, and the establishment of copyright relations with foreign countries.²⁰ Most notable from this vastly and quickly adaptable period was the establishment of the Office as a separate department within the Library of Congress in 1897.²¹ Practically, the creation of the Office as a conduit for the Library of Congress allows experts in the intellectual property field to assess and grant copyright protection and assist Congress on a wide range of copyright issues.²² Through this work, the Office has committed itself to “helping fulfill copyright’s Constitutional purpose and to promote creativity and free expression for the benefit of all.”²³

Since its inception, the most notable and significant change to copyright

OFF., <https://www.copyright.gov/history/copyright-exhibit/beginnings/> [https://perma.cc/KBJ6-9FP8] (last visited Feb. 16, 2025).

¹⁵ See *What Is the Purpose of Copyright Law*, *supra* note 14.

¹⁶ U.S. CONST. art. I, § 8, cl. 8.

¹⁷ *Id.*

¹⁸ *Overview*, *supra* note 13; Copyright Act of 1790, 1 Stat. 124 (1790).

¹⁹ Copyright Act of 1790, 1 Stat. 124; see *Copyright Act of 1790*, U.S. COPYRIGHT OFF., <https://copyright.gov/about/1790-copyright-act.html> [https://perma.cc/P2BV-2ZB5] (last visited Feb. 13, 2026).

²⁰ See *Copyright Timeline: A History of Copyright in the United States*, ASSOC. OF RSCH. LIBS. [hereinafter *Timeline*], <https://www.arl.org/copyright-timeline/> [https://perma.cc/GGE3-33DQ] (last visited Feb. 20, 2026).

²¹ *See id.*

²² *See id.*

²³ *Overview*, *supra* note 13.

regulation was the revision of the Copyright Act in 1976 (the Act).²⁴ A guide to the new law stated in relevant part:

The law under which we have been operating for the past 68 years is the Act of March 4, 1909. This act is based on the printing press as the prime disseminator of information. Significant changes in technology have resulted in a wide range of new communications techniques that were unknown in 1909—for example, radio, television, communications satellites, cable television, computers, photocopying machines, videotape recorders, etc., and there are promises of even greater changes in the future. This growth in technology made revision of the Act of 1909 imperative.²⁵

The Act, in relevant part to this Note, solidified that “[c]opyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”²⁶ Further, it provides that copyright protection does not extend to any “idea, procedure, process, system, method of operation, concept, principle or discovery” regardless of how such things are described, explained, illustrated, or embodied in an otherwise copyrightable work.²⁷

Though the revisions to the Act in 1976 spurred sweeping practical changes to the nature of copyright law and the function of the Office—including broadening the scope of works eligible for protection, introducing the life-based copyright duration, formalizing other protective doctrines, etc.—what is perhaps the most important function of the Act is its discussion of the purpose of regulatory revisions.²⁸ In essence, its introduction solidified the notion that the world and its cultural and economic landscapes are ever-changing and that the current regulations must adapt to accommodate such landscapes.²⁹

²⁴ Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976). See generally U.S. COPYRIGHT OFF. & LIBR. OF CONG., GENERAL GUIDE TO THE COPYRIGHT ACT OF 1976 (1977) [hereinafter COPYRIGHT GUIDE], <https://www.copyright.gov/reports/guide-to-copyright.pdf> [<https://perma.cc/96NZ-XV9S>] (last visited Feb. 16, 2025) (providing a general guide to the Copyright Act of 1976).

²⁵ COPYRIGHT GUIDE, *supra* note 24, at 1:1.

²⁶ 17 U.S.C. § 102.

²⁷ *Id.*

²⁸ See *Timeline*, *supra* note 20.

²⁹ *Id.*; Paul Edward Geller, *Copyright History and the Future: What's Culture Got to Do with It?*, 47 J. COPYRIGHT SOC'Y U.S.A. 209, 215–19 (2000) (tracing the history of copyright law beginning with the

The flexibility and opportunity to make amendments and revisions to both the Constitution and subsequent regulatory acts engrains in the legislative branch's function that it must make laws and regulations which are adaptive to its current reality—specifically, in this Note, the reality of the ever-present and rapidly growing landscape of Artificial Intelligence in artistic spaces.³⁰

2. Agency Power Post-*Loper Bright*

For decades, inherent in an agency's power, such as that of the Office, was judicial deference. In 1984, the seminal case of *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.* mandated that federal courts defer to agency interpretations of ambiguous statutes.³¹ The purpose of agency deference was to prevent the court from substituting its own interpretation of the statute for the reasonable interpretation made by the agency.³² Under *Chevron*, when a statute was silent or ambiguous with respect to a specific issue, the question before the court was not one of interpretation but whether the agency's action was based on a permissible construction of the statute.³³

In 2024, the Supreme Court overturned *Chevron* deference in *Loper Bright Enterprises v. Raimondo*.³⁴ The decision in *Loper Bright* requires that “courts decide legal questions by applying their own judgment...and set aside any such action inconsistent with the law as they interpret it.”³⁵ And it prescribes no deferential standard for [the] court to employ in answering those legal questions.”³⁶

The overturning of *Chevron* places the Office, along with all other agencies, in an unprecedented position—one in which they are endowed with total power and oversight over the rules and regulations of their respective subject matter but no power in the resolution of issues resulting from such rules and regulations.³⁷

The unsettled standard of deference afforded to the Office remains an issue for copyright protection as well as all other agency regulations.³⁸ This

introduction of the printing press in 15th-century Europe); see Brad A. Greenberg, *Rethinking Technology Neutrality*, 100 MINN. L. REV. 1495, 1502 (2016) (“Modern copyright law’s existence can be traced to a transcendent technology: the movable-type printing press.”).

³⁰ See COPYRIGHT GUIDE, *supra* note 24.

³¹ *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 866 (1984) (holding “[w]hen a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency’s policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail.”).

³² See *id.* at 842–43.

³³ See *id.* at 843.

³⁴ *Loper Bright Enter. v. Raimondo*, 144 S. Ct. 2244, 2247 (2024).

³⁵ *Id.* at 392.

³⁶ *Id.*

³⁷ See *id.*

³⁸ See *id.*

Note will argue in part that when courts are settling issues of elemental refusals, i.e., those that are substantiated by the work not meeting the statutory requirements of a copyright, substantial deference should be given to the Office and its decisions.

B. Copyright Basics and Associated Doctrines

The following sections will give a brief overview of the human authorship requirement necessary for copyright protection, the different avenues to obtaining ownership over a copyrightable work, and associated tests and doctrines for establishing such authorship-ownership relationships.

1. Human Authorship

The Act, found in Title 17 of the United States Code, establishes the two necessary elements for copyright protection: (1) an original work of authorship that is (2) fixed in a tangible medium of expression.³⁹ Despite the Act's extensive, though non-exclusive, list of copyrightable works and its various tangible media of expression, the Office continues to grapple with delineating the boundaries of copyright protection and defining authorship when technology is involved.⁴⁰

Section 102 provides that authorship may be “aided by a machine or device,” defined in Section 101 as any tool that is now known or later developed.⁴¹ Implicit from Section 102, and furthered by subsequent case law, is the fact that an author may employ such a machine, device, or tool in assistance with their creative process,⁴² but the Office will not register works *solely* produced by a machine or “mere mechanical process that operates randomly or automatically without any creative input or intervention from a human author.”⁴³

In the absence of an affirmative definition of authorship, the Office instead provides guidance on what an author is not.⁴⁴ Crucially, in determining whether an application for registration satisfies the first statutory

³⁹ 17 U.S.C. § 102(a).

⁴⁰ *See id.*; *see also* U.S. COPYRIGHT OFF., COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 306 (3d ed. 2021) [hereinafter COMPENDIUM], [<https://perma.cc/X6LR-S7XT>] (providing, as a manual, guidance for agency staff related to their statutory duties and for all related to institutional practices and relevant principles of law).

⁴¹ 17 U.S.C. § 102(a).

⁴² *Id.*; *see, e.g.*, M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 435 (4th Cir. 1986) (finding that plaintiff's work is not precluded from copyright under the provisions of section 102(b) because “the words of a program [as expressed through the computer program] are used ultimately in the implementation of a process” which “should in no way affect their copyrightability”).

⁴³ 17 U.S.C. § 102(a).

⁴⁴ COMPENDIUM, *supra* note 40, § 313.2.

element, the Office asks whether the work is one of human authorship with a computer or other device merely being an *assisting instrument*, or whether the traditional elements of authorship in the work were conceived and executed by the device itself.⁴⁵

In the seminal case *Burrow-Giles Lithographic Co. v. Sarony* in 1884, the Court held that an image created through the use of new tools is eligible for copyright protection so long as the at-issue photographs are “representatives of original intellectual conceptions of the author.”⁴⁶ Importantly, this case continues to serve as the cornerstone of copyright law’s adaptability to the ever-changing technological landscapes. The Court further attempted to fill in the gaps in the statutory language by stating that an author is defined as “he to whom anything owes its origin; originator; maker; one who completes a work of science or literature.”⁴⁷

In cases following *Burrow-Giles*, the threshold for a work being a representative of original intellectual conceptions of the author has evolved in a myriad of different phrasings.⁴⁸

Section 306 of the Copyright Compendium comments that copyright law only protects “the fruits of intellectual labor” that “are founded in the creative powers of the mind.”⁴⁹ Further, it states that “[b]ecause copyright law is limited to “original intellectual conceptions of the author,” the Office will refuse to register a claim if it determines that a human being did not create the work,” and that works produced by a machine or process that operates randomly or automatically without any creative input from a human are not eligible for protection.⁵⁰

Urantia Found v. Maaherra states that “some element of human creativity must have occurred” for the work at issue to be copyrightable.⁵¹ Perhaps one of the most circular descriptions of the threshold is further found in the Copyright Compendium, wherein the Office states the “crucial question” in assessing human authorship is whether the work “is basically one of human authorship.”⁵²

What is evident from all of these standards and guidelines, regardless of their dissimilarity and possible confusion in phrasing, is that the human authorship requirement, whether a machine aids the author or not,

⁴⁵ *Id.*

⁴⁶ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

⁴⁷ *Id.* at 57–58 (citing to Worcester’s Dictionary definition of “author”).

⁴⁸ See e.g., *Chosen Figure LLC v. Kevin Frazier Prods., Inc.*, 795 F. Supp. 3d 1232, 1250 (C.D. Cal. 2025) (This case follows *Burrow-Giles* and shows how the threshold has evolved, holding that modern factors such as lighting, backdrop, and posing are now considered by courts).

⁴⁹ See COMPENDIUM, *supra* note 40, § 306 (quoting *In re Trade-Mark Cases*, 100 U.S. 82, 94 (1879)).

⁵⁰ *Id.*

⁵¹ *Urantia Found. v. Maaherra*, 114 F.3d 955, 958 (9th Cir. 1997) (rev’d on other grounds).

⁵² COMPENDIUM, *supra* note 40, § 313.2 (quoting U.S. COPYRIGHT OFF., 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> [<https://perma.cc/S3ND-Y665>]).

necessitates the exercise of creative control and decision-making during the production of the work of a human.⁵³ However, much like the lack of definition for authorship and the standard for a work being an original intellectual conception, there exists no clear standard for what satisfies this seemingly necessary exercise of creative control and decision-making power.⁵⁴

Though the phrasing in both the Act and the Copyright Compendium is indicative of the importance of human input, control, creative direction, and intent in the process of creation, all that remains from the ambiguous language is a list of hyper-specific examples of what *isn't* sufficient for establishing human authorship.⁵⁵ Thus, authors are left merely with a circular definition of original works human authorship—a work authored with human input—accompanied by specific exceptions and unclear standards of creativity and control.⁵⁶

2. Alternatives to Establishing Authorship Rights

The following three sections address the alternatives, or perhaps exceptions, to the human authorship requirement and thus establish ownership rights in a copyright. As discussed in the section above, the most usual relationship is one in which the author and owner are synonymous.⁵⁷ That is, the author of the work is the owner of the copyright. Below are three alternatives and exceptions to this relationship. They are (1) joint works wherein authors are co-owners of the entire work; (2) collective works wherein authors are only entitled to their specific contributions to the entire work; and (3) works-for-hire wherein ownership rights are contractually delegated from the author to a third party.⁵⁸ All three of these exceptions rest on manifestations of intent to enter into such relationships, whether explicit or implicit.⁵⁹

a. Joint Works

A joint work is “a work prepared by two or more authors” and created “with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole.”⁶⁰ Authors of joint works hold

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *See id.*; 17 U.S.C. § 102.

⁵⁶ *See id.*; 17 U.S.C. § 102.

⁵⁷ *See discussion supra* Section I.B.1.

⁵⁸ *See* 17 U.S.C. § 101.

⁵⁹ *See id.*

⁶⁰ *Id.*

undivided interests in the creation despite any differences in each creator's contribution.⁶¹ The authors of joint works are considered co-owners of the copyrights in the work, and each has an independent right to use or license the work.⁶²

For an author of a joint work to claim ownership over the final work, there must be a showing of each author's intent for their contributions to be "interdependent" and inseparable from the final work as a whole.⁶³ However, this "standard showing" has been difficult to uniformly apply where individual contributions are less than clear-cut.⁶⁴ To address this difficulty, courts have devised tests to determine how intent is manifested and who constitutes an author.

One such test is the "copyrightable" test from the Seventh Circuit, which explains that an author must contribute more than mere direction or ideas and that the element of creation or translating ideas into a fixed and tangible expression entitled to copyright protection is what grants a contributor the title of "author."⁶⁵

Similarly, though with slight application differences, the Ninth Circuit has explained that whether a contributor is a co-author of a joint work is a question of fact.⁶⁶ Under this test, elements such as creative control, intent, decision-making authority, arrangement of the parties, etc., are taken into account in assessing the position of each contributor as an author.⁶⁷

The Ninth Circuit in *Aalmuhammed v. Lee* further explained that these elements "cannot be reduced to a rigid formula, because the creative relationships to which they apply vary too much."⁶⁸ Further, the court stated that "[d]ifferent people do creative work together in different ways, and even among the same people working together the relationship may change over time as the work proceeds."⁶⁹ However, regardless of the apparent fluidity of this test, the Ninth Circuit, in agreement with the Second and Seventh Circuits, stated that control will be the most important factor in determining authorship status and thus conferring ownership rights.⁷⁰

b. Collective Works

⁶¹ *Id.*

⁶² *Id.* §§ 106, 201.

⁶³ *Id.* § 101.

⁶⁴ See, e.g., *Erickson v. Trinity Theater, Inc.*, 13 F.3d 1061 (7th Cir. 1994); *Aalmuhammed v. Lee*, 202 F.3d 1227 (9th Cir. 2000).

⁶⁵ *Erickson*, 13 F.3d at 1071.

⁶⁶ *Aalmuhammed*, 202 F.3d at 1231.

⁶⁷ *Id.* at 1232–34 (discussing elements taken into account in assessing the position of each contributor as an author).

⁶⁸ *Id.* at 1235.

⁶⁹ *Id.*

⁷⁰ *Id.* at 1234.

A collective work is a work, such as a periodical, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works themselves, are assembled into a collective whole.⁷¹ The authorship in a collective work “comes from the original selection, coordination, and arrangement of the independent works included in the collective work.”⁷²

For purposes of registration, a collective work is considered a singular work, and the registration of such work covers only the copyrightable authorship in the selection, coordination, or arrangement of the work.⁷³

Any such contribution “to a collective work is a separate and independent work that is included within the collective work.”⁷⁴ A “contribution to a collective work can be registered separately from the collective work in combination with the collective work” if it meets certain requirements.⁷⁵ For example, an author who writes an article for a periodical would have the ownership rights to his contribution—the article—but no ownership rights to the collective work—the periodical—as a whole.⁷⁶ The ownership rights presumptively acquired by each author are the privilege of producing and distributing their contribution, not the collective work as a whole.⁷⁷

Unlike joint works, the explicit phrasing of a manifestation of intent between the two parties is absent from the definition of a collective work.⁷⁸ However, the definition of a collective work implies that each author has consented to only obtaining ownership rights to their contributions.⁷⁹ As such, though there may be no explicit contractual manifestation of intent as one might see in an employee contract, the nature of a collective work necessarily implies the existence of an intent to consent to obtain ownership over one’s contributions.⁸⁰

c. Works-For-Hire

⁷¹ U.S. COPYRIGHT OFF., CIRCULAR 34 MULTIPLE WORKS 1–2 (2021) [hereinafter CIRCULARS 34], <https://www.copyright.gov/circs/circ34.pdf> [<https://perma.cc/Y93D-J732>] [hereinafter CIRCULARS 34].

⁷² *Id.* at 2.

⁷³ *Id.*

⁷⁴ *Id.* at 2.

⁷⁵ *Id.*

⁷⁶ *See id.* at 4.

⁷⁷ *See id.*

⁷⁸ Compare 17 U.S.C. § 101 (joint works) (“A joint work is a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole.”), with *id.* (collective work) (“A collective work is a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.”).

⁷⁹ See CIRCULARS 34, *supra* note 72, at 2–3.

⁸⁰ *See id.* at 3 (explaining that individual contributions to a collective work generally require separate registration, but a single application may cover both the collective work and its component works when the same claimant owns each).

The final alternative to establishing ownership rights in a copyright is the work-for-hire doctrine.⁸¹ This doctrine refers to works whose ownership belongs to a third party rather than the creator.⁸² There are two categories for work-for-hire: (1) works prepared by an employee within the scope of their employment; and (2) a work specially commissioned for use as a contribution to a collective work, as part of a motion picture or other audiovisual work, as a translation, as a supplementary work, as a compilation, as an instructional text, as a test or answer for a test, or as an atlas, if the parties expressly agree in a written and signed agreement that the work shall be considered a work for hire.⁸³

In *Marvel Characters, Inc. v. Kirby*, the Second Circuit held the work-for-hire doctrine endows copyright protection to an employer when they “induce[] the creation of the work and [have] the right to direct and supervise the manner in which the work is carried out.”⁸⁴

Moreover, several circuits apply three factors in assessing whether a work is work for hire.⁸⁵ The factors include: (1) whether the work in question is the kind of work the employee is employed to perform; (2) whether the employee’s work occurs substantially within the authorized time and space limits; and (3) whether the employee’s work is made, at least in part, for the purpose of serving the employer.⁸⁶

These factors exhibit not only the circumstances relevant in determining which works are works-for-hire but, perhaps more importantly for purposes of this Note, exemplify the value placed on the process of creation.⁸⁷ Much like joint works, while explicit intent or contractual obligations primarily determine ownership rights, blurred within this determination is an evaluation of the process.⁸⁸ Though it can be assumed that an employment contract specifies the scope of employment, including things such as time and space limits, the weighing of these factors is indicative of an emphasis on the procedural facts of creation and less on the creative integrity of the final work.⁸⁹

The work-for-hire doctrine is pertinent in part to this Note for two reasons. First, similarly to collective and joint works, the work-for-hire doctrine

⁸¹ See 17 U.S.C. § 101.

⁸² See *id.*

⁸³ *Id.*

⁸⁴ *Marvel Characters, Inc. v. Kirby*, 726 F.3d 119, 139 (2d Cir. 2013) (citing *Martha Graham Sch. & Dance Found., Inc. v. Martha Graham Ctr. Of Contemporary Dance, Inc.*, 380 F.3d 624, 635 (2d Cir. 2004)).

⁸⁵ See COMPENDIUM, *supra* note 40, §506.2; U.S. COPYRIGHT OFF., CIRCULARS 30 WORKS MADE FOR HIRE 3–5 (2024) [hereinafter CIRCULARS 30], <https://www.copyright.gov/circs/circ30.pdf> [perma.cc/4TVS-XWRT].

⁸⁶ COMPENDIUM, *supra* note 40, § 506.2; CIRCULARS 30, *supra* note 86, at 1.

⁸⁷ COMPENDIUM, *supra* note 40, § 506.2; CIRCULARS 30, *supra* note 86, at 1.

⁸⁸ See CIRCULARS 30, *supra* note 86, at 3–5.

⁸⁹ See *id.* at 4–5.

departs from the presumed owner-author relationship.⁹⁰ The work-for-hire doctrine, like joint works, is a caveat to the owner-author relationship that rests on a manifestation of intent for the ownership rights in the work of one to be endowed to a third party.⁹¹ However, unlike joint works, the manifestation of intent in works-for-hire is usually explicit and contractual, as seen in employee contracts or an independent contractor agreement.⁹²

Second, as discussed in the following sections, some authors have attempted to register their AI-generated works with the Office through the work-for-hire doctrine, arguing that their ownership of the AI system equates to their ownership of works created by such a system.⁹³

C. Artificial Intelligence Systems

While there is no straightforward definition of AI, it is best understood as “a set of techniques aimed at approximating some aspect of human or animal cognition using machines.”⁹⁴ The full breadth of AI, its subsets, and its different coding strategies will not be discussed at length in this Note.⁹⁵

The prompt-based AI at issue in this Note falls under the umbrella of “autonomous AI.”⁹⁶ Under the umbrella of autonomous AI sits a middle layer known as machine learning.⁹⁷ Machine learning refers generally to the capacity of a system to improve its performance of a given task; practically, however, machine learning tasks involve translating human-input prompts to create an output through the recognition of patterns of datasets and data

⁹⁰ See *id.* at 1; cf. 17 U.S.C. § 101 (defining joint works and showing how authorial intent for joint works is interdependent and inseparable).

⁹¹ See CIRCULARS 30, *supra* note 86, at 1.

⁹² See 17 U.S.C. § 101 (requiring an express written instrument for certain works to qualify as work for hire).

⁹³ See *infra* Sections II.A–D.

⁹⁴ Ryan Calo, *Artificial Intelligence Policy: A Primer and Roadmap*, 51 U.C. DAVIS. L. REV. 399, 404 (2017).

⁹⁵ See *Artificial Intelligence (AI)*, U.S. DEP’T OF STATE, <https://www.state.gov/artificial-intelligence/> [<https://perma.cc/4C3T-Y3M4>] (last visited Feb. 2, 2026).

⁹⁶ See *Autonomous AI Agents: The Evolution of Artificial Intelligence*, SHELFOS (Jan. 7, 2025) <https://shelf.io/blog/the-evolution-of-ai-introducing-autonomous-ai-agents/> [<https://perma.cc/837C-XXJV>].

⁹⁷ Sara Brown, *Machine Learning, Explained*, MIT MGMT. SLOAN SCH. (Apr. 21, 2021) <https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained> [<https://perma.cc/9FWQ-N8MX>]; Arne Wolfewicz, *Deep Learning vs. Machine Learning—What’s the Difference*, MEDIUM (July 14, 2020) <https://medium.com/levity/deep-learning-vs-machine-learning-whats-the-difference-e367803bb96d> [<https://perma.cc/HNU7-3S8X>] (summarizing key differences between machine learning and deep learning, including model structure, data needs, and typical use cases); see also Bernard Marr, *Artificial Intelligence: What’s the Difference Between Deep Learning and Reinforcement Learning?*, FORBES (Dec. 10, 2021, at 08:30 ET), <https://www.forbes.com/sites/bernardmarr/2018/10/22/artificial-intelligence-whats-the-difference-between-deep-learning-and-reinforcement-learning/> [<https://perma.cc/6T8X-MTHD>] (explaining the distinction between deep learning and reinforcement learning and how each is used in modern AI systems).

points, ultimately producing.⁹⁸

In other terms, machine learning is a subfield of AI that gives computers the ability to learn without the need for specific human programming.⁹⁹ However, the process of machine learning hinges on input data from human intervention.¹⁰⁰ Then, based on the input data, a machine learning algorithm will produce an estimate about a pattern in the data.¹⁰¹ Common examples of basic machine learning AI systems include chatbots, predictive text suggestions, language translation apps, Netflix suggestions based on the user's watch history, etc.¹⁰²

Under the umbrella of machine learning, AI then sits the third (and final) layer of AI sophistication: deep learning AI.¹⁰³ Deep learning AI resembles a human brain-like structure.¹⁰⁴ Though deep learning AI systems are a subset of machine learning AI systems, the learning process differs dramatically.¹⁰⁵ A simplistic understanding of the difference between deep learning and machine learning is that machine learning recognizes patterns strictly through ordinary statistical structure, and deep learning recognizes patterns through an inference-driven logical structure.¹⁰⁶

Autonomous AI systems referenced in this Note use a combination of deep learning and machine learning algorithms to translate text prompts into images that are subsequently compared with datasets matching the prompt to corresponding objects and images, which are then deconstructed and reassembled in one cohesive final product.¹⁰⁷

For example, if an artist were to input the prompt “create a water-color image of a sailboat sitting in a harbor at sunset,” the system will comb through the datasets for each factor individually—watercolor illustrations, sailboats, harbors, sunsets, i.e., the machine learning recognition¹⁰⁸—and place these learned, individual factors into a singular image that can be understood to the human eye in alignment with the prompt read in its entirety,

⁹⁸ See Brown, *supra* note 98; see also Harry Surden, *Machine Learning and Law*, 89 WASH. L. REV. 87, 88 (2014) (“Broadly speaking, machine learning involves computer algorithms that have the ability to ‘learn’ or improve in performance over time on some task.”).

⁹⁹ See Brown, *supra* note 98.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ Kyle Aubrey, *What's the Difference Between Deep Learning Training and Inference?*, NVIDIA (Oct. 2025), <https://blogs.nvidia.com/blog/2016/07/29/whats-difference-artificial-intelligence-machine-learning-deep-learning-ai/> [<https://perma.cc/HD76-TPEA>]; see Vijayalakshmi A. Lepakshi, *Machine Learning and Deep Learning Based AI Tools for Development of Diagnostic Tools*, in COMPUTATIONAL APPROACHES FOR NOVEL THERAPEUTIC AND DIAGNOSTIC DESIGNING TO MITIGATE SARS-COV-2 INFECTION 399, 399–420 (2022) [<https://perma.cc/4GJH-76Z6>].

¹⁰⁴ Terrence J. Sejnowski, *The Unreasonable Effectiveness of Deep Learning in Artificial Intelligence*, 117 PNAS 300333, 300333 (2020).

¹⁰⁵ Wolfewicz, *supra* note 98; see Sejnowski, *supra* note 105; see Brown, *supra* note 98.

¹⁰⁶ Brown, *supra* note 98; Wolfewicz, *supra* note 98; see Sejnowski, *supra* note 105, at 30033–38.

¹⁰⁷ See Wolfewicz, *supra* note 98.

¹⁰⁸ See *id.*

i.e., the deep learning recognition.¹⁰⁹

These systems render their outputs based on numerous factors, such as when a prompt is made, the objects/images the AI has previously learned, and the language (both the language of origin and the structure and placement of words and qualifying phrases in the prompt).¹¹⁰ Importantly, however, these systems will not replicate such prompts, nor will inputting an identical prompt in two different systems render the same product.¹¹¹

D. Intersections of Technology and Copyright Authorship

1. Early Technology and Rapid Revisions

From the outset of machine-aided authorship, the analysis focused on the role of the human author.¹¹² In 1879, Eugene Pouillet stated the cases for and against recognizing photographs as works of authorship.¹¹³ Though the concept of photographs being uncopyrightable might seem outlandish today, the advent of photography confronted judges with the novel task of determining whether a human could claim authorship of a machine-generated image.¹¹⁴ In response to the notion that machine-created works erase the concept and purpose of authorship in the copyright world, Pouillet purported that “[t]hought retains its supreme role. In photography, the apparatus takes the place, though not entirely, of hand labor—the material of the labor—but it leaves to the artist to its fullest extent the labor of the mind.”¹¹⁵

Burrow-Giles furthered this conception, holding that the Constitution’s Copyright Clause permitted photographs to be subject to copyright “so far as they are representatives of the original intellectual conceptions of the author.”¹¹⁶ The Court in *Burrow-Giles* defined author as “he to whom anything owes its origin; originator; maker; one who completes a work of scient or literature” and described them as a class of persons to which the copyright is an “exclusive right...to the production of his own genius or intellect.”¹¹⁷

¹⁰⁹ See *id.*; see also Brown, *supra* note 98 (providing a discussion of human factors that Machine Learning can achieve).

¹¹⁰ Brown, *supra* note 98; see Wolfewicz, *supra* note 98.

¹¹¹ Brown, *supra* note 98; see Wolfewicz, *supra* note 98.

¹¹² Jane C. Ginsburg & Luke Ali Budiardjo, *Authors and Machines*, 34 BERKELEY. TECH. L. J. 343, 354 (2019) (discussing avenues of authorship pre-AI, noting, for example “[o]n the one hand, if the output owes its origin to a machine, then it lacks a human author, and by that token, cannot be the object of copyright. On the other hand, if the machine provides a means of expressing the photographer’s vision of the image, and the author controls that means, then the machine has not displaced the author.”).

¹¹³ *Id.* at 354–55.

¹¹⁴ *Id.* at 354.

¹¹⁵ *Id.* at 357.

¹¹⁶ *Id.* at 347 n.11. (quoting *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884)).

¹¹⁷ *Burrow-Giles*, 111 U.S. at 58.

Just as cameras and the inception of machine-assisted works became an unprecedented issue before the courts, so too have computer-generated works.¹¹⁸ The concept of computer authorship was first addressed in 1965 after numerous copyright registrants submitted applications that year for works at least partly authored by computers.¹¹⁹

In 1974, with computers becoming increasingly more accessible, the National Commission of New Technological Uses of Copyrighted Works (CONTU) was formed to begin studying the intersection of copyright law, and emerging technology and, more specifically, the creation of new, possibly copyrightable works with computer assistance.¹²⁰

In its first report, CONTU recommended no new changes be made to existing copyright law and stated that “computers were nothing more than inert tools of creation...the development of artificial intelligence was too speculative to worry about...and there was no reasonable basis for concluding that a computer in any way contributes authorship to a work produced through its use.”¹²¹

Only eight years after CONTU’s final report, the Congressional Office of Technology Assessment (OTA) revised the initial question of computer authorship, emphasizing the “increasing sophistication of computer programs and the interactive nature of computing,” which, naturally, raised the question of co-creatorship and the ownership rights accompanying a human and computer co-author relationship.¹²² Since these revisions, it is evident that such a conclusion, though cognizant of the ever-changing dynamics of technology in future decades, was insufficient to withstand the growing accessibility to computers and their autonomous functions present today.¹²³

It is clear that, throughout history, copyright law has proven sufficiently malleable to cover works created with or involving technologies developed long after traditional media had been memorialized on paper.¹²⁴ However, equally clear is that the underlying adaptability of copyright law has been an uncontested understanding that human creativity is at the core of

¹¹⁸ See generally Annemarie Bridy, *The Evolution of Authorship: Work Made by Code*, 39 COLUM. J.L. & ARTS 395 (2016) (providing background on the evolution of authorship related to work made by code).

¹¹⁹ *Id.* at 396.

¹²⁰ *Id.*

¹²¹ *Id.* CONTU “raised and quickly dismissed the possibility that works could be created independently by computers.” *Id.*

¹²² NAT’L COMM’N ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT 44 (1978), <http://eric.ed.gov/PDFS/ED160122.pdf> [<https://perma.cc/9ASG-HNDF>].

¹²³ See Bridy, *supra* note 119, at 397 (“While it’s true that robots don’t yet run the world, computer systems dedicated to particular tasks have continued to get smarter and more independent over time...[s]ome of these systems are designed to produce works that fall under the rubric of algorithmic or generative art.”).

¹²⁴ See *Timeline*, *supra* note 20.

copyrightability, whether on its own or channeled through new tools and new media.¹²⁵

2. Artificial Intelligence’s Place in Copyright Law

i. Recent Case Law

Although the Office has recognized the use of other computer systems as tools for creation (e.g., Photoshop, Lightroom), works produced by autonomous AI are not subject to copyright registration.¹²⁶ The expanding landscape of such autonomous AI systems calls for new regulations and registration guidelines.¹²⁷

Most recently, and most parallel to the discussion in this Note, is the case *Allen v. Perlmutter*, wherein Allen, an artist, sought a reversal of the Office’s rejection of protection for his award-winning work “Theatre D’opera Spatial.”¹²⁸ In September 2022, Allen filed an application to register the work and considered himself the author and owner of the copyright in the work.¹²⁹ The central issue was Allen’s use of AI in his work.¹³⁰

In his Complaint, Allen’s counsel wrote:

[Allen] selected the colors, the style, and the era of the artwork, and arranged the elements in the image to represent the woman dressed in elegant Victorian dresses performing opera on stage...He selected and arranged the elements to depict each performer wearing a space helmet, creating a striking contrast between the classical and the sci-fi elements...[he] set the stage in a grand theater, with an audience watching intently, overlooking a large circular window through which the vast expanse of the outer world is visible, adding an otherworldly ambiance to the performance.¹³¹

Allen’s creation of his work was a result of 624 iterations of prompts,

¹²⁵ See *id.*

¹²⁶ 17 U.S.C. § 101; see *Timeline*, *supra* note 20.

¹²⁷ See *Bridy*, *supra* note 119, at 396.

¹²⁸ Plaintiff’s Complaint and Request for Declaratory Relief and Demand for Jury Trial, *Allen v. Perlmutter*, No. 1:24-cv-2665, at 1 (D. Colo. Sep. 26, 2024) [<https://perma.cc/4RB7-JLTK>].

¹²⁹ *Id.* at 3.

¹³⁰ *Id.* at 3–4 (stating that the central dilemma Allen faced was copyrightability of AI generated images and the implications for those “using AI-generated images for profit,” and quoting an author who purported that the issue was not whether it can be said that the human owns the AI-generated piece, but the issue instead was trying to assess who, if anyone, owns the art at all).

¹³¹ *Id.* at 5.

studying of the AI's behavior, and a calculated 114.4 hours of selecting, arranging, and instructing the AI on what he wanted it to generate—sometimes focusing on a single corner or pixel of the work.¹³² Allen argued that such laborious and meticulous efforts and instructions for the AI system were comparable to those of Adobe Photoshop, wherein such a system merely functions to assist in the creation of the work, not in an authorial capacity.¹³³

The Office denied the registration on the basis that the work “lacks the human authorship necessary to support a copyright claim.”¹³⁴ In their First Refusal of Registration, the Office stated the refusal rested on the notion that “all of the pictorial and graphic content within the deposit is attributable to the AI,” concluding that Allen “did not paint, sketch, color, or otherwise fix and of the deposit” and that “this does not define human author and authorship as [the Office] understands it.”¹³⁵

Further, in their Response to First Request for Consideration, the Office noted:

Mr. Allen had no control over how the artificial intelligence tool analyzed, interpreted, or responded to these prompts. Nor did he exercise any control over the actual creation, development, or execution of the image that Midjourney rendered on his screen. Simply put, the resulting image was the output of the artificial intelligence technology, and your correspondence does not identify any specific creative authorship in this image that can be attributed to Mr. Allen.¹³⁶

The second case pertinent to this Note's analysis is the 2023 case *Thaler v. Perlmutter*, wherein the petitioner, Thaler, attempted to establish ownership rights for his AI work through the work-for-hire doctrine.¹³⁷ Thaler, the human author, informed the copyright register that the work at issue in his application was created autonomously by an AI system.¹³⁸ He also informed the register that he owned the system and predicated his assertion of ownership of the work's copyrights on his ownership of the AI system.¹³⁹ Simply put, Thaler treated himself as the employer and his AI

¹³² *Id.* at 6–9.

¹³³ *Id.* at 10.

¹³⁴ *Id.* at 3.

¹³⁵ *Id.* at 11.

¹³⁶ *Id.* at 12.

¹³⁷ *Thaler v. Perlmutter*, 687 F. Supp. 3d 140, 143 (D.D.C. 2023).

¹³⁸ *See id.* at 143.

¹³⁹ *See id.* at 143–44.

system as an employee under the work-for-hire doctrine, meaning that anything created by the AI system was necessary.¹⁴⁰

The Court, as well as the register, found this argument to be lackluster and affirmed the Office's denial of Thaler's copyright registration based on the reasoning that his image lacked human authorship.¹⁴¹ The Court held in pertinent part:

Undoubtedly, we are approaching new frontiers in copyright as artists put AI in their toolbox to be used in the generation of new visual and other artistic works. The increased attenuation of human creativity from the actual generation of the final work will prompt challenging questions regarding how much human input is necessary to qualify the user of an AI system as an "author" or a generated work, the scope of the protection obtained over the resultant image, how to assess the originality of AI-generated works where the systems may have been trained on unknown pre-existing works, how copyright might best be used to incentivize creative works involving AI, and more...This case, however, is not nearly so complex...Given that the work at issue did not give rise to a valid copyright upon its creation, plaintiff's myriad theories for how ownership of such a copyright could have passed need not be further addressed...[t]he work-for-hire provisions of the Copyright Act...presupposes that an interest exists to be claimed. Here, the image autonomously generated by plaintiff's computer system was never eligible for copyright, so none of the doctrines invoked by plaintiff conjure up a copyright over which ownership may be claimed.¹⁴²

Again, although this Note rests on the adoption of AI systems as a tool for authorship, not as an employee to a human employer, Thaler's extrapolation of such a relationship exhibits the desire and necessity for further adaptations and expansions of Copyright Law to fit the technological landscape.¹⁴³ Furthermore, regardless of the specific author-owner relationship between each petitioner in these cases, they emphasize the difficulty the Office faces in determining the standard for creative input, as well as solidly defining

¹⁴⁰ See *id.* at 143.

¹⁴¹ See *id.* at 145, 150.

¹⁴² *Id.* at 149.

¹⁴³ *Id.* at 146.

human authorship when AI is involved.¹⁴⁴

3. Copyright Office AI Regulations

i. 2023 Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence

On March 10, 2023, the Office released Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence.¹⁴⁵ In the opening paragraph of their discussion of the human authorship requirement, the Office wrote, “In [our] view, it is well-established that copyright can protect only material that is the product of human creativity. Most fundamentally, the term ‘author’...excludes non-humans.”¹⁴⁶

The guidance, though not extensive or entirely specific, does provide in pertinent part to this Note that “the Office will consider whether the AI contributions are the result of ‘mechanical reproduction’ or instead of an author’s own original mental conception, to which [the author] gave visible form.”¹⁴⁷ The answer, the guidance purports, necessitates evaluation on a case-by-case inquiry and “will depend on the circumstances, particularly how the AI tool operates and how it was used to create the final work.”¹⁴⁸

To supplement these definitions, the regulatory guide provided examples of eligible and non-eligible works containing AI.¹⁴⁹ Importantly, the Office stated that a work does not satisfy the human authorship requirement when “an AI technology determines the expressive elements of its output.”¹⁵⁰ However, a work that a human has selected, arranged, or modified AI-generated material in a “sufficiently creative way” or to such a degree that “modifications meet the standard for copyright protection.”¹⁵¹

The regulations conclude that “in each case what matters is the extent to which the human had creative control over the work’s expression and ‘actually formed’ the traditional elements of authorship.”¹⁵²

ii. 2024 Copyright Regulatory Guidance: Part 1

¹⁴⁴ *Id.*; Plaintiff’s Complaint and Request for Declaratory Relief and Demand for Jury Trial, *Allen v. Perlmutter*, No. 1:24-cv-2665, at 3–4 (D. Colo. Sep. 26, 2024) [<https://perma.cc/4RB7-JLTK>].

¹⁴⁵ Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190, 16190–94 (Mar. 16, 2023) (to be codified at 37 C.F.R. § 202) [<https://perma.cc/57L3-CAYY>].

¹⁴⁶ *Id.* at 16191.

¹⁴⁷ *Id.* at 16192 (quoting *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884)).

¹⁴⁸ *Id.*

¹⁴⁹ *See id.* at 16191-16192.

¹⁵⁰ *Id.* at 16192.

¹⁵¹ *Id.* at 16192–93.

¹⁵² *Id.* at 16193.

In 2024, the Office released Part 1 of a two-part regulation for works created using AI, which focuses on the protection and regulation of digital replicas.¹⁵³ Though digital replicas will not be pertinent to the analysis of this Note, Part 1 of the regulation both explicitly and implicitly illustrates the fears and difficulties the Office faces regarding expanding and adapting law to accommodate AI.¹⁵⁴ These fears and difficulties, however, will be addressed in the following sections of this Note and will serve as further illustration of the Office’s tonal outlook on AI.¹⁵⁵

Firstly, the Office recognizes that “[i]n a short period of time, generative AI technology has become so sophisticated, and so accessible, that minimal expertise is required to rapidly produce such replicas” and that “[digital replicas’] volume has skyrocketed” on social media and other internet platforms.¹⁵⁶ One fear explicitly made in Part 1, relevant to both digital replicas and the use of AI in works, is the protection of artistic style.¹⁵⁷ The regulations state:

The Office received many comments seeking protection against AI “outputs that imitate the artistic style of a human creator. Commenters voiced concern of the ability of an AI system, in response to a text prompt asking for an output “in the style of artist X” to quickly produce a virtually unlimited supply of material evoking the work of a particular author, visual artist, or musician. They asserted that these outputs can harm, and in some cases have already harmed, the market for that creator’s work.¹⁵⁸

The only conclusory finding of the Office on this issue is their acknowledgment of the “seriousness of these concerns” and their belief that “appropriate remedies should be available for this type of harm,” even though “copyright law’s application in this area is limited, as it does not protect artistic style as a separate element of a work.”¹⁵⁹ However, such “appropriate remedies,” though necessary, may be difficult to achieve considering a lack of deference to agency interpretation.¹⁶⁰ Without such deference, artists may be forced to leave their concerns not to the controlling regulatory body but to

¹⁵³ U.S. COPYRIGHT OFF., COPYRIGHT AND ARTIFICIAL INTELLIGENCE: PART 1: DIGITAL REPLICAS (2024) [hereinafter REPORT PART 1], <https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-1-Digital-Replicas-Report.pdf> [<https://perma.cc/V6G3-JBVF>].

¹⁵⁴ See generally *id.* (highlighting these fears and difficulties as early as the Foreword & Preface).

¹⁵⁵ See *id.* at iii–v.

¹⁵⁶ *Id.* at 1.

¹⁵⁷ *Id.* at 53.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at 54.

¹⁶⁰ *Id.* at 47.

the court system.¹⁶¹

iii. 2024 Copyright Regulatory Guidance: Part 2

In January 2025, the Office released the second and final part of its regulatory guidance on copyright and artificial intelligence.¹⁶² Part 2 addressed the copyrightability of works generated by AI systems in relation to the “type and level of human contribution” sufficient to warrant copyright protection.¹⁶³

Importantly, Part 2 began by acknowledging the distinction between using AI as a tool for creation and using AI as a “stand-in” for human creativity.¹⁶⁴ The Office noted that while certain uses of AI systems may *enhance* human expression without being *responsible* for expressive choices, the distinction between the two depends on the nature of the use itself.¹⁶⁵ To analyze this distinction, the Office established three types of human contributions to AI-generated outputs: (1) prompts that instruct an AI system to generate an output; (2) expressive inputs that can be perceived in AI-generated outputs; and (3) modifications or arrangements of AI-generated outputs. Of the three, the only relevant type to this Note is the Office’s discussion of prompt-based contributions.¹⁶⁶

For prompt-based human contributions, the Office’s analysis hinges on the amount of human control exerted upon the AI system.¹⁶⁷ In comparing the level of human control over prompt-based contributions to that of joint works and works for hire, the Office noted that the ability to “oversee, direct, and understand the contributions of a commissioned artist” is, in part, the standard for sufficient control and determination of the output’s expressive elements.¹⁶⁸ The lack of such direct control between users and AI systems supports the Office’s notion that, though users may have control over the desired expressive elements contained in the prompt, at present, the user does not and cannot control how the AI systems process and generate these elements.¹⁶⁹ In short, the Office stated that the gaps between prompts and the resulting outputs demonstrate the user’s lack of control over the expressive elements produced in the output, thus negating any copyrightability for

¹⁶¹ *Id.*

¹⁶² See REPORT PART 2, *supra* note 5.

¹⁶³ *Id.* at ii.

¹⁶⁴ *Id.* at 12.

¹⁶⁵ *Id.* (“The Office agrees that there is an important distinction between using AI as a tool to assist in the creation of works and using AI as a stand-in for human creativity. While assistive uses that enhance human expression do not limit copyright protection, uses where an AI system makes expressive choices require further analysis.”).

¹⁶⁶ *Id.* at 12–27 (discussing the three types of human contributions to AI-generated outputs).

¹⁶⁷ *Id.* at 18.

¹⁶⁸ *Id.*

¹⁶⁹ See *id.* at 18–19.

works created by prompts alone.¹⁷⁰

Further, the Office noted that any argument that cites the “time, expense, or effort” spent repeatedly revising prompts as evidence of human control is irrelevant.¹⁷¹ Specifically, the Office distinguished how copyright protects original works of authorship, “not hard work or sweat of the brow.”¹⁷² In likening the revision of prompts to the re-rolling of dice, the Office was steadfast in its conclusion that no amount of time, no nature of labor, or any number of prompts provides sufficient human control over the AI system to make the output copyrightable.¹⁷³

The Office acknowledged that “[t]here may come a time when prompts can sufficiently control expressive elements in AI-generated outputs to reflect human authorship.”¹⁷⁴ However, the Office was silent as to what this reflection of human authorship would look like.¹⁷⁵ In the absence of a clear standard to distinguish prompt-based contributions that reflect human authorship from those which solely reflect AI systems’ expressive output, authors are left with a blanket rule that prompt-based contributions alone are insufficient to claim copyright authorship.¹⁷⁶

II. ANALYSIS

This part illustrates how the emergence of generative AI systems in copyright law is comparable to the emergence of previous technologies, such as the printing press, camera, and computer, and should be regarded similarly in copyright application evaluation. Further, it explores possible standards for evaluating the threshold for human involvement in prompt-based AI works and how much deference should be given to the Office’s decisions on such works.

A. *AI as a Tool for Authorship*

There are two core ideas in copyright law’s overlap with AI, which exist simultaneously and contradictorily: human creativity and adaptability.¹⁷⁷ In

¹⁷⁰ *Id.* at 21.

¹⁷¹ *Id.* at 20.

¹⁷² *Id.* (citing *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 352 (1991)).

¹⁷³ *Id.*

¹⁷⁴ *Id.* at 21.

¹⁷⁵ *See id.* at 41 (showing that the Office remained silent in its conclusion).

¹⁷⁶ *See id.*

¹⁷⁷ *See* *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 57 (1884) (providing an overview of the amendments to the Copyright Act, and noting of its adaptability that “[t]he only reason why photographs were not included in the extended list in the act of 1802 is, probably, that they did not exist, as photography, as an art, was then unknown, and the scientific principle on which it rests, and the

Burrow-Giles, the court recognized that the constitution was broad enough for the Copyright Act to include photographs and thus qualify a camera as a tool did not negate the presence of human authorship.¹⁷⁸

In *Goldstein v. California*, the court held that the constitutional scope of Congress's power, as endowed to it through the Intellectual Property Clause, is so broad that such "writings" are not "limited to script or printed material" but rather encompass "any physical rendering of the fruits of creative intellectual or aesthetic labor."¹⁷⁹

Even if the most cynical evaluator were to view these adaptability-centric cases as nothing more than an exhaustive list of exceptions, it is undeniable that the statutory language of the Act expressly accounts for the adaptability of new definitions and new tools.¹⁸⁰ The addition of the phrase "now known or later discovered" tagged at the end of 17 U.S.C. § 102(a) (requirements for copyrightability) explicitly provides room for the law to be adapted with the introduction of later developed tools or mediums of expression.¹⁸¹

In their assessment of historical cases concerning the adaptability of copyright law, the Court in *Thaler* conceded that "human involvement in, and the ultimate creative control over, the work at issue" is key to the conclusion of whether or not new types of work fall within the bounds of copyright and that "human authorship is a bedrock requirement for copyright."¹⁸² In taking the holding of *Thaler* coupled with the denial of protection in *Allen*,¹⁸³ the Office's denial of registration for works containing AI is directly contradictory to the historical theme that human creativity has been and will continue to be shaped by the present technological landscape.¹⁸⁴

B. Revised Standard for Human Authorship

chemicals and machinery by which it is operated, have all been discovered long since the statute was enacted... We entertain no doubt that the constitution is broad enough to cover an act authorizing copyright of photographs, so far as they are representatives of original intellectual conceptions of the author.")

¹⁷⁸ *Id.* at 58.

¹⁷⁹ *Goldstein v. California*, 412 U.S. 546, at 561 (1973).

¹⁸⁰ *See* 17 U.S.C. § 102(a).

¹⁸¹ *Id.*

¹⁸² *Thaler v. Perlmutter*, 687 F. Supp. 3d 140, 146 (D.D.C. 2023).

¹⁸³ *Id.* at 150; Plaintiff's Complaint and Request for Declaratory Relief and Demand for Jury Trial, *Allen v. Perlmutter*, No. 1:24-cv-2665, at 3 (D. Colo. Sep. 26, 2024), https://storage.courtlistener.com/recap/gov.uscourts.cod.237436/gov.uscourts.cod.237436.1.0_1.pdf [<https://perma.cc/4RB7-JLTK>].

¹⁸⁴ *See* Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190, 16191 (Mar. 16, 2023) (to be codified at 37 C.F.R. § 202), <https://www.govinfo.gov/content/pkg/FR-2023-03-16/pdf/2023-05321.pdf> [<https://perma.cc/57L3-CAYY>] ("In the Office's view, it is well-established that copyright can protect only material that is the product of human creativity. Most fundamentally, the term 'author,' which is used in both the Constitution and the Copyright Act, excludes non-humans.")

This section evaluates three possible standards for evaluating the human authorship requirement. The standards are listed in order from the least restrictive to the most restrictive view of the human authorship requirement.

1. Fruits of Intellectual Labor

In interpreting the Copyright Clause, the Supreme Court has explained that it is “intended to motivate the creative activity of authors and inventors,” and “to allow the public access to products of their genius.”¹⁸⁵ Inherent in the Court’s analysis is that protectable copyrights are grounded in the creativity of authors and inventors and that the works themselves, which are eligible for protection, are merely the products of such genius and creativity.¹⁸⁶ As discussed below, the statutory requirements of originality and human authorship are often inextricably intermingled. In a logical sense, originality is a conception of the human mind, and evaluating the originality of a work necessitates an evaluation of the creative labor and skill of the author.¹⁸⁷

Importantly, the phrasing of a work as a “fruit of intellectual labor” as understood today is applied in evaluating the originality requirement.¹⁸⁸ It is the position of this Note that, given the difficulty of extrapolating clear definitions of either term, the governing standard for the human authorship and originality *together* should be whether the work is one of intellectual labor.

For the first time in *Trade-Mark Cases* in 1879, the Supreme Court addressed the constitutional scope of “writings” under Copyright Law.¹⁸⁹ The Court held that, in determining which works were considered writings that were eligible for copyright protection, “originality is required.”¹⁹⁰

Originality in a writing requires: (1) independent creation; and (2) a modicum of creativity or intellectual labor.¹⁹¹ The showing of a “modicum of intellectual labor” clearly constitutes an essential constitutional element.¹⁹²

The *In re Trade-Mark Cases* established that, while the word “writings” may be liberally construed to include original designs for engravings, printings, etc., “it is only such as are original, and are founded in the creative

¹⁸⁵ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984).

¹⁸⁶ *See id.* (discussing the benefits of copyrights, and noting the “reward” of copyright protection “serves to induce release to the public of the products of his creative genius.”) (internal quotations omitted) (quoting *United States v. Paramount Pictures*, 334 U.S. 131, 158 (1948)).

¹⁸⁷ *See id.* at 431–32.

¹⁸⁸ *See, e.g., Goldstein v. California*, 412 U.S. 546, 561 (1973).

¹⁸⁹ *In re Trade-Mark Cases*, 100 U.S. 82, 94 (1879).

¹⁹⁰ *Id.*

¹⁹¹ *See Feist Publ’ns v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991) (citing to *In re Trade-Mark Cases*, 100 U.S. at 94).

¹⁹² *Id.* at 347 (quoting DAVID NIMMER, 1 NIMMER ON COPYRIGHT §1.08[A] (1963)).

powers of the mind.”¹⁹³ Further, works that satisfy the originality requirement and are thus eligible for protection are “the fruits of intellectual labor.”¹⁹⁴

In comparing trademarks and other areas of intellectual property, *In re Trade-Mark Cases* clearly illustrates the dividing line being one of creative labor in writing: the trade mark does not “depend upon novelty, invention, discovery, or any work of the brain. It requires no fancy or imagination, no genius, no laborious thought. It is simply founded on priority of appropriation.”¹⁹⁵

This division exemplifies the presence of creativity and intellectual labor inherent in copyrights and how, although originality is not synonymous with novelty, what sets copyrights aside from the illustrative properties of trademarks is the finding of creative, aesthetic, and intellectual labor.¹⁹⁶

As with the originality requirement in *In re Trade-Mark Cases*, the Court in *Burrow-Giles* explained the constitutional scope of an “author” and construed it to mean “he to whom anything owes its origin; originator; maker.”¹⁹⁷ The Court in *Burrow-Giles* explained that copyrights are limited to “original intellectual conceptions of the author,” that protectable writings include those “by which the ideas of the mind of the author are given visible expression.”¹⁹⁸ Even further, the Court asserted that establishing infringement upon such rights hinges on proof of the existence of “originality, of intellectual production, of thought, and conception.”¹⁹⁹

Since the Court published *The Trade-Mark Cases* and *Burrow-Giles*, these cases remain the cornerstone of understanding the statutory requirements of a protectable work. Today, it is inarguable that these cases present two different thresholds for satisfying the statutory requirements. The human authorship requirement, as plainly explained in *Burrow-Giles*, is made by a showing of origin, a seemingly higher bar than the bar for originality, especially considering the bar for originality can be as low as selecting and arranging images.²⁰⁰

However, as inherent in copyright law, these standards have been adapted, expanded, and, at times, intermingled.²⁰¹ For example, the Court in *Feist Publ'ns v. Rural Tel. Serv. Co.*, in assessing the holdings from the cases stated above, held that the Court’s definitions of “authors” and “writings”

¹⁹³ *In re Trade-Mark Cases*, 100 U.S. at 94.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ *Burrow-Giles Lithographic Co. v. Saronoy*, 111 U.S. 53, 57–58 (1884).

¹⁹⁸ *Id.* at 58.

¹⁹⁹ *Id.* at 60.

²⁰⁰ Compare *Feist Publ'ns v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991) (explaining that the bar for originality is “extremely low” in that even a slight amount of creativity will suffice), with *Burrow-Giles*, 111 U.S. at 60 (explaining that the photograph in question is an original, protected work of art as it is a product of an individual’s intellectual invention).

²⁰¹ See, e.g., *Feist Publ'ns*, 499 U.S. at 346.

made it “unmistakably clear that these terms presuppose a degree of originality.”²⁰² Further, originality may be found even in “ordinary photographs of familiar scenes” where the photographer exercised “skill and judgement in arrangement, grouping, and lighting effects.”²⁰³

Goldstein further expanded the understanding of original writings to include those that “may be interpreted to include any physical rendering of the fruits of creative intellectual or aesthetic labor.”²⁰⁴ Additionally, the Court in *Hemingway’s Estate v. Random House, Inc.*, evaluated how a work’s eligibility for protection is not predicated on the “tangible embodiment of the author’s work but the *creation* of the work itself.”²⁰⁵

Though these cases contain slight semantic differences concerning their evaluation of the copyrightable works, they all exemplify how changing landscapes in Copyright Law may sometimes unintentionally necessitate the lines of the statutory requirements to be blurred together.²⁰⁶

As such, a showing of originality necessitates a showing of intellectual and aesthetic labor on the author’s part.²⁰⁷ Thus, establishing originality is predicated first on a showing of authorship and secondly on whether an author has created a work which can be described as a “fruit of intellectual labor.”²⁰⁸ The intermingling of the evaluation of what constitutes an author and what constitutes originality, so far as to make a work eligible for protection, begs the need for a uniform standard under which a showing of intellectual labor both proves the existence of a human author as well as the originality of the work.²⁰⁹

In support of this, consider this example: the threshold for originality is satisfied simply by showing a photographer selecting and arranging images. In a purely logical sense, a showing of mere selection and arrangement, satisfactory for the originality requirement, necessitates a showing of someone or something responsible for selecting and arranging.²¹⁰ There can be no evaluation of originality without the presence of creative labor on the

²⁰² *Id.* at 346.

²⁰³ *See, e.g.,* *Stuff v. La Budde Feed & Grain Co.*, 42 F. Supp. 493, 495 (E.D. Wis. 1941) (“[O]rdinary photographs of familiar scenes are to be protected where the photographer had to exercise skill and judgment in arrangement, grouping, and lighting effects.”).

²⁰⁴ *Goldstein v. California*, 412 U.S. 546, 561 (1973).

²⁰⁵ *Estate of Earnest Hemingway v. Random House, Inc.*, 244 N.E.2d 250, 254 (N.Y. 1968).

²⁰⁶ *Compare id.* (predicating a work’s eligibility for copyright protection not on the “tangible embodiment of the author’s work but the creation of the work itself”), and *Goldstein*, 412 U.S. at 561 (predicating a work’s eligibility for copyright protection on the physical labor and/or creation of the work), with *Feist Publ’ns*, 499 U.S. at 346 (focusing on the “originality” or creativity of the work as opposed to the labor of creating the work).

²⁰⁷ *See, e.g., Goldstein*, 412 U.S. at 561.

²⁰⁸ *See, e.g., In re Trade-Mark Cases*, 100 U.S. 82, 94 (1879).

²⁰⁹ *See id.*

²¹⁰ *See, e.g., Stuff v. La Budde Feed & Grain Co.*, 42 F. Supp. 493, 495 (E.D. Wis. 1941) (noting, for example “it has been held that ordinary photographs of familiar scenes are to be protected where the photographer had to exercise skill and judgment in arrangement, grouping, and lighting effects”).

author's part.²¹¹

As such, if this standard were adopted, a work would be eligible for protection and satisfy *both* the statutory requirements of originality and human authorship if it was found to be a fruit of intellectual labor—i.e., the showing of the author being the “origin” is proved through a showing of intellectual labor, and such intellectual labor is sufficient to establish the originality of the work.²¹²

Though this standard may ease the evaluation of the statutory requirements for copyright protection (i.e., by combining two standards into one) and its minimum criteria may allow the Office more flexibility and opportunities for adaptability to the ever-changing technological landscape, it is accompanied by two significant drawbacks.

First, as has been seen with the current analysis of the human authorship requirement as well as with this Note's proposed solutions, quantifying the criteria for this standard will be difficult. Moreover, as discussed in Part II.C., in the absence of agency deference, the very real possibility exists for the Office to have little control over how the definition of “intellectual labor” is construed. Or, perhaps worse, what little control the Office would have in determining the quantification of intellectual labor may be easily overridden in the court system.

Connected to this lack of control from the Office is the second disadvantage to this standard: inadequacy of addressing the fears of AI-generated works overriding and eliminating the human authorship requirement.²¹³ As established, these proposed standards rest on the inclusion of AI systems as a tool for authorship.

However, with no requirement of agency deference, the possibility exists that courts rule to register works outside of the Office's conception of intellectual labor. Without such deference afforded to the experts at the Office, the courts could, in theory, refuse to carve out exceptions that would address the fears of autonomously generated works and instead take the “low bar” of fruits of intellectual labor at face value and register any work that has any minimum showing of effort, equitable to selecting and arranging pictures.²¹⁴

²¹¹ See *In re Trade-Mark Cases*, 100 U.S. at 94 (1879) (“[T]he word writings...[include] only such as are *original*, and are founded in the creative powers of the mind.”).

²¹² See *id.*

²¹³ See REPORT PART I, *supra* note 154, at iii.

²¹⁴ Compare *Thaler v. Perlmutter*, 687 F. Supp. 3d 140, 146 (D.D.C. 2023) (arguing that copyright law protects only works of human creation), with *Feist Publ'ns v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991) (explaining that the “requisite level of creativity” is “extremely low” to make a work copyrightable), and *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884) (holding that a photograph, even though a product of a machine, contained at least a minimum amount of creative contributions from the photographer as to afford copyright protection).

2. Expression of Procedural Authorial Intent

Adopting a standard for evaluating the human authorship requirement that is centered on the creative process and authorial intent in such process is supported in this Note by two legal doctrines: intent necessary for joint, collective, and works-for-hire *and* freedom of expression under the First Amendment.²¹⁵ This standard is designed to address the current basis for refusal for works containing AI wherein a work is created by “random selection” or “mechanical process.”²¹⁶ The following analysis exhibits a possible process for the Office’s examination of works created in whole or in part through the use of generative-AI systems that focuses on each individual author’s procedure and the extent of their authorial intent.

As previously discussed, Part 2 of the Office’s regulation of AI expressly prohibits comparing a human user to an AI system in joint works.²¹⁷ However, where the Office strays is their focus of control in joint works and a user’s lack of control over an AI system.²¹⁸ Though control is a factor in establishing ownership in a joint work, the focus on control alone is misguided.²¹⁹ Instead, what should be compared between the two is the *intent* of an author, not the amount of control exerted over the system.²²⁰

Intent is present in all other modicums of authorship and ownership in copyright law *except* the most basic form: the owner-author relationship.²²¹ As previously discussed, whether explicitly or implicitly present, intent is an integral part of joint works, collective works, and works-for-hire.²²² Moreover, the determination of said intent in both joint works and works-for-hire is established, either in whole or in part, by examining the authors’ process.²²³

Importantly, the standard of procedural authorial intent would be designed to address the aforementioned refusal of protection based on works made through a “mechanical process” or that possess a seemingly random

²¹⁵ 17 U.S.C. §101; U.S. CONST. amend I.

²¹⁶ COMPENDIUM, *supra* note 40, § 906.8 (noting “[w]orks made through purely mechanical processes or with an automated selection and arrangement are not eligible for copyright protection without sufficient human authorship,” and that the Office “will refuse to register a claim in a work that is created through the operation of a machine or process without sufficient human interaction, even if the design is randomly generated.”).

²¹⁷ REPORT PART 2, *supra* note 5, at 10.

²¹⁸ *See id.* at 10–11.

²¹⁹ *See id.* at 10 (stating that joint authorship arises when one makes a “copyrightable contribution,” and not necessarily control over the work).

²²⁰ *See* 17 U.S.C. §101 (“A ‘joint work’ is a work prepared by two or more authors with the *intention* that their contributions be merged into inseparable or interdependent parts of a unitary whole.”).

²²¹ *See* 17 U.S.C. §101.

²²² *See id.*

²²³ *See id.*

nature.²²⁴ As previously discussed in this Note, there seems to be a division between works created through random nature, wherein a human employs the use of typical tools (paint brushes, cameras, Adobe Photoshop²²⁵), and works created by random nature, wherein a human employs the use of AI.²²⁶

Though this division is not recognized or discussed by any copyright statutes or case law, it is exemplified best in cases involving the constitutional right to freedom of expression under the First Amendment.²²⁷

In *Hurley v. Irish-Am. Gay, Lesbian & Bisexual Grp. Of Bos.*, the Court noted the works of Jackson Pollock in determining the constitutional scope of what constitutes an “expression.”²²⁸ Though these constitutional bounds will not be relevant to the following sections of this Note, what is especially relevant is the, perhaps unintentional, exploration of random means of expression.²²⁹ Specifically, the Court noted that a “succinctly articulable message is not a condition of [expression]” and clearly illustrated their evaluation of the constitutional bounds of expression is not one of visual creativity (or lack thereof) in the final product but one of procedural creativity.²³⁰

In applying this example to the world of copyright law, it is undeniable that the Office would (and has) register Pollock’s work and other works of the like that possess a “random nature.”²³¹ However, at face value, Pollock’s works are ones created by a random nature or a purely mechanical process.²³² Pollock is the author. His machine is a paint bucket or paint brushes, which create splatter.²³³ The only control he has over the production of the work is which direction he chooses to sling such tools. He is not creating each splatter by hand, nor inputting any other artistic or aesthetic direction to the piece

²²⁴ See COMPENDIUM, *supra* note 40, § 313.2 (“[T]he Office will not register works produced by a machine or mere mechanical process that operated randomly or automatically without any creative input or intervention from a human author.”).

²²⁵ See *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884) (showing how some tools, like a camera, that are used to create works are afforded copyright protection).

²²⁶ See COMPENDIUM, *supra* note 40, § 313.2.

²²⁷ U.S. CONST. amend I.

²²⁸ *Hurley v. Irish-Am. Gay, Lesbian and Bisexual Grp. of Bos.*, 515 U.S. 557, 569 (1995).

²²⁹ See *id.* at 569–70.

²³⁰ *Id.* at 569.

²³¹ See e.g., Dan. L. Burk, *Thirty-Six Views of Copyright Authorship, by Jackson Pollock*, 58 HOU. L. REV. 263, 270 (2020) (generally noting Pollock, known for his “drip and splash” style of painting, “remains a figure of constant reconsideration in copyright commentary, not only because of his notoriety, but because his style continues to challenge both popular conceptions of expression in art and doctrinal strictures of expression in the law.”).

²³² John Shea, *A “Random” God?*, JESUIT POST (Sep. 30, 2013), <https://thejesuitpost.org/2013/09/a-random-god/> [https://perma.cc/S2G8-R3ME] (“For Pollock, randomness is part of his technique. Like evolution via natural selection, Pollock creates something beautiful by relying upon both predictable and random factors.” Shea notes the main “random factor” for Pollock is gravity, which Pollock relies on “to drip, splatter, pour and fling paint on a large canvas fixed on the floor” to create his paintings.)

²³³ *Id.*

outside of his choice of canvas size, paint color, and volitional movements.²³⁴

These facts, when broken down, read as one of random nature, which begs the following question: if Pollock is allowed registration of his works created through the random nature of the tool, regardless of how conventional the tool is, why does the introduction of AI change the Office's analysis of procedure? In other words, what is it about Pollock's procedure that makes his works eligible for protection that differs from the procedure of artists using AI?

Interestingly, Part 2 of the Office's regulations also denounces the comparison between Pollock's work and work created independently by an AI system.²³⁵ However, much like its improper analysis of the relationship between joint works and AI works, the Office's focus is misguided.²³⁶ Part 2 stated that the issue is the "degree of human control" and that "the putative author must be able to constrain or channel the program's processing of the source material."²³⁷ Again, although control is a relevant factor in assessing an author's intent, it should not be dispositive of copyrightability.²³⁸ In short, an author's lack of control over the autonomously produced pixels does not negate their authorial intent nor should render their work ineligible for copyright protection.

²³⁴ Compare Daniel Speight, *Jackson Pollock: Trash or Treasure?*, ANIMATO (Mar. 16, 2025), <https://animato.uk/blogs/news/jackson-pollock-trash-or-treasure?srsId=AfmBOoqXiV0AXPMXrtatFC6Z0CDsvHLWZV15dsy3tQ0YrzHonDQHKtZY>, [https://perma.cc/393W-D7AG] (discussing the extent of Pollock's control over his paintings and noting that Pollock "laid his canvases flat on the floor, pouring and dripping paint from all angles...[which] allowed Pollock to engage with his work physically, using his entire body in a dance-like process that merged movement with creation."), with Mike Pinnington, *Jackson Pollock: Separating Man from Myth*, TATE, <https://www.tate.org.uk/art/artists/jackson-pollock-1785/jackson-pollock-separating-man-myth>, [https://perma.cc/2HQ8-FAJ3] (last visited Mar. 26, 2026) (quoting Pollock's assertion that "I can control the flow of the paint; there is no accident, just as there is no beginning and no end.").

²³⁵ REPORT PART 2, *supra* note 5, at 20 (distinguishing some commenters' analogies of Jackson Pollock's paintings or nature photography, "which may be eligible for copyright protection even if the author does not control where paint may hit the canvas or when a wild animal may step into frame," to works that are created by or with AI, noting Pollock's works "differ from AI-generated materials in that the human author is principally responsible for the execution of the idea and the determination of the expressive elements in the resulting work." Discussing further that "Jackson Pollock's process of creation did not end with his vision of a work. He controlled the choice of colors, number of layers, depth of texture, placement of each addition to the overall composition – and used his own body movements to execute each of these choices," and that "'some elements of randomness does not eliminate authorship,' but 'the putative author must be able to constrain or channel the program's processing of the source material.'" Ultimately guiding that "[t]he issue is the degree of human control, rather than the predicatability of the outcome.") (quoting Kernochan Center For Law, Media and the Arts Initial Comments Submitted in Reponse to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5)).

²³⁶ See, e.g., Tim Boucher, Initial Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 8 (Oct. 26, 2023); Christa Laser, Initial Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023 Notice of Inquiry at 4; MPA Initial Comments Submitted in response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 47-50; Pamela Samuelson et. al., Initial Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 4.

²³⁷ See *id.* at 21.

²³⁸ See *id.* at iii.

Again, as seen through every other mode of establishing authorship, some sort of authorial intent must be present.²³⁹ For intent which is not explicitly stated or signed over in a contract, the courts look to the circumstances of the procedure.²⁴⁰

For works-for-hire, the courts inquire into the time and scope of employment and if the production of such a work is, at least in part, the kind of production you would expect in the specific employment capacity.²⁴¹ For joint works, the courts inquire into multiple factors, including creative control, decision-making power, and the circumstances surrounding the parties *during the period of creation*.²⁴² Thus, it can be assumed that “random selection” is a phrase evaluated on procedure and must be accompanied by some threshold of creative *intent* to be eligible for protection, not solely control.

3. No Registration of Prompt-Based AI Works

The current regulatory standard for registering AI-generated works is that any part of a work that contains AI or was created solely through prompt-based AI is ineligible for registration.²⁴³

The most glaring issue concerning this standard is its overinclusion. Based on the Office’s publications, the hesitancy surrounding the registration of AI centers on its harmful and exploitative effects (e.g., digital replicas) and the possibility that the use of AI systems may completely negate a core principle

²³⁹ See 17 U.S.C. § 101.

²⁴⁰ See, e.g., *Thomas v. Larson*, 147 F.3d 195, 201-202 (2d Cir. 1998) (discussing the Second Circuit precedential case for determining joint authorship of a copyright absent an express agreement, *Childress v. Taylor*, 945 F.2d 500, 508-509 (2d Cir. 1991), and noting “the *Childress* court suggested a more nuanced inquiry into the factual indicia of ownership and authorship, such as how a collaborator regarded herself in relation to the work in terms of billing and credit, decisionmaking, and the right to enter into contracts. In this regard, the court stated that ‘[t]hough joint authorship does not require an understanding by the co-authors of the legal consequences of their relationship, obviously some distinguishing characteristic of the relationship must be understood for it to be the subject of their intent.’”)

²⁴¹ See CIRCULARS 30, *supra* note 86, at 3.

²⁴² See *Thomas v. Larson*, 147 F.3d 195, 201-02 (1998) (compiling Second Circuit cases illustrating the factors used by courts to determine joint authorship); see also *Erickson v. Trinity Theater, Inc.*, 13 F.3d 1061, 1068 (7th Cir. 1994) (“[A] work is ‘joint’ if the authors collaborated with each other, or if each of the authors prepared his or her contribution with the knowledge and *intention* that it would be merged with the contributions of other as ‘inseparable or interdependent parts of a unitary whole.’ The touchstone here is *the intention, at the time the writing is done*, that the parts be absorbed or combined into an integrated unit...”).

²⁴³ See REPORT PART 2, *supra* note 5, at 3 (“[T]he Office’s longstanding position that human authorship is an essential requirement for copyright protection in the United States...if a work contains more than a de minimis amount of AI-generated material, the applicant should disclose that information and provide a brief statement describing the human author’s contribution.”) (quoting H.R.Rep. No. 1476, 94th Cong., 2d Sess. 121, 120 (1976); S.Rep. No. 473, 94th Cong., 2d Sess. 103-04 (1975)) (emphasis in original)).

of copyright law: creation and innovation of the human mind.²⁴⁴

Regardless of these fears' merit, the rapidly expanding accessibility of AI systems undeniably creates the possibility of chaos, harm, and exploitation.²⁴⁵ This standard ensures protection against that or, at a minimum, provides those harmed or exploited with the ability to bring a lawsuit.²⁴⁶ Undoubtedly, the prevention of or restitution from harm and exploitation is an advantage that may only be achieved by a blanket policy such as this.²⁴⁷

However, as can be expected, the cost of ensuring against all harm is the overinclusion of good-faith authors. This resulting disadvantage contradicts not only copyright law's core principle of adaptability but, in doing so, is in direct contention with the constitutional purpose of the Office.²⁴⁸ The total refusal of works containing AI or created through prompt-based contributions not only goes against promoting the progress of science and art but, in some cases, may actively discourage the use of AI.

The central issue of this standard is one of competing interests. Choosing this standard means choosing between two core principles of copyright law. The commitment to refusing the registration of AI works completely ensures that authors of a work are the only ones endowed with ownership of the work's rights and, therefore, safeguarded from the harm and exploitation that has become persistent with the emergence of AI. However, in choosing to safeguard authors and their ownership rights, the Office limits those it deems to be authors.

C. Should The Copyright Office Be Afforded Deference Concerning Eligibility?

Regardless of which of the standards previously stated is adopted by the Office, the conclusions reached by the chosen standard may well be null and

²⁴⁴ See *id.*; see also REPORT PART 1, *supra* note 154, at iii (stating the purpose of REPORT PART 1 is to address copyright commenters responses to the Office's inquiry that asked "whether existing laws provide sufficient protection against unauthorized digital replicas or if new protection is needed at the federal level." The Executive Summary of REPORT PART 1 states further that "[the Office] analyzed the comments received, performed additional research, and consulted with other agencies on their relevant areas of expertise. Based on all of this input, we have concluded that a new law is needed.").

²⁴⁵ See REPORT PART 2, *supra* note 5, at 4–5 (discussing the harms of AI-generated digital replicas, and grouping the harms into three categories: (1) generative AI systems being used to produce sexually explicit deepfake imagery; (2) deepfakes of celebrities, CEOs, etc., presenting an increased risk of fraudulent financial scams; and (3) digital replicas undermining the United States' political system and news reporting by making misinformation "impossible to discern."); see also REPORT PART 2, *supra* note 5, at ii (discussing the potential harms of AI-generated material being eligible for copyright protection, stating some commenters are concerned that "an increased proliferation of AI-generated outputs would undermine incentives for humans to create").

²⁴⁶ REPORT PART 1, *supra* note 154, at iv.

²⁴⁷ See generally *id.* (focusing on Section II.B and the Conclusion section).

²⁴⁸ See Bridy, *supra* note 119, at 396.

void if objections to such a standard make it to the courtroom. The absence of deference to executive agencies and their opinions leaves the door open for courts to replace expert evaluation with their own, which, in a hyperbolic sense, may result in the Office's opinions being confined to the walls of the Office itself.

What is evident amid the inconsistencies of degree of deference in the post-*Loper Bright* courtroom, both in relation to the Office as well as other federal agencies, is the need for some guiding principle.²⁴⁹ Though this analysis will not conclude that a blanket principle will be effective for every agency, and much less for specific issues within each agency, minimal guidance on deference is needed to avoid inconsistencies in awarding copyright registration.

As such, this Note argues that significant deference be given to the Office concerning statutory/elemental refusals—i.e., any refusal predicated on the work lacking any phrase or element contained within the statutory definition of an “original work of human authorship fixed in a tangible medium of expression.”²⁵⁰

Different from other areas of statute interpretation, the human authorship requirement is one that is constantly adapting seemingly unnoticed, considering the lack of change to statutory language or the Office being able to offer clear and non-circular definitions of what satisfies the requirement.²⁵¹ This requirement is not one of *sole* ambiguity, in which the judicial system inherently interprets, but one whose ambiguity stems from the ever-changing landscape of multiple other areas of interest—technology, art, etc. As such, its ambiguity is not one that can or should be resolved in a singular case, as the court has previously done in other areas of the law.

III. RESOLUTION

The Office's current evaluative standard for the human authorship requirement is contradictory to the core principle of adaptability of copyright law.²⁵² Since its inception, the Office has adapted its standards to be tailored to the changing technological landscape.²⁵³ Including AI systems as a tool for authorship and creating a new standard for evaluating the human authorship requirement for works containing AI will help effectuate the constitutional purpose of promoting the progression of arts and sciences, ensuring the

²⁴⁹ See generally *Loper Bright Enters. v. Raimondo*, 144 S. Ct. 2244 (2024) (overturning federal agency deference and leaving much uncertainty for the Office and other federal agencies as to the level of deference they now have).

²⁵⁰ 17 U.S.C. § 102(a).

²⁵¹ See COMPENDIUM, *supra* note 40, § 313.2 (showing how the Office provides examples of what does *not* satisfy the requirement).

²⁵² See COPYRIGHT GUIDE, *supra* note 24, at 1:2–3.

²⁵³ See *id.* at 1:2–3.

effectiveness of copyright law's adaptive nature. Secondly, courts deferring to the opinions of the Office in cases concerning refusals based on the statutory requirements of a validly protectable copyright will guarantee some level of uniformity of interpretation, allowing the Office to be the deciders of scope for the two most basic requirements of a copyright.

A. Reforming AI As a Tool to Authorship and the Implementation of the Expression of Procedural Authorial Intent Standard

It is the proposal of this Note that the Office include AI systems in its conception of tools to authorship and that it adopts the above analyzed standard of expression of procedural authorial intent when evaluating the satisfaction of the human authorship requirement.

First, this Note proposes that the Office explicitly include prompt-based AI as a tool for authorship in the Copyright Compendium and in any following regulatory guides on copyrightability and AI. Certainly, there can be no AI images without some threshold of human creativity and input.²⁵⁴ In a logical sense, without a human opening an AI system and typing in a singular prompt, the system sits idly.²⁵⁵

The addition of AI systems under the “machine, device, or tool” umbrella²⁵⁶ is no more adaptive than the addition of the camera. Before the introduction of the camera, the only way to visually display images was through sketches, paintings, murals, etc. The computer, compared to AI systems, allows artists to autonomously capture an image without the tediousness or laborious efforts of sketching a subject.²⁵⁷

From a practical perspective, it would be difficult to imagine a world wherein photographic or motion picture works would not be eligible for copyright protection. From a legal and historical perspective, it would be equally difficult to conceptualize how such a lack of adaptability in Copyright law is in line with promoting innovation in the sciences and arts.

As such, viewing AI systems as a tool to authorship not only serves to carry out the mission of the Office, but helps eliminate the possible fear of AI-generated works being contradictory to and, in some cases, making obsolete the human authorship requirement.²⁵⁸

²⁵⁴ See *Artificial Intelligence (AI)*, *supra* note 96.

²⁵⁵ See *id.*

²⁵⁶ See 17 U.S.C. § 102(a).

²⁵⁷ See *id.*

²⁵⁸ USPTO, PUBLIC VIEWS ON ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY POLICY 21 (2020) (“Artificial intelligence is a tool just as much as Photoshop, Garage Band, or any other consumer software in wide use today” and arguing that recognition of AI as a tool has historically been the practice of the Office for similar tools that have been used in the past to create works eligible for copyright

Second, this Note proposes that the Office adopt the standard of an expression of procedural authorial intent to replace its current blanket denial of all prompt-based AI works. As has always been with copyright law, a work's eligibility for protection does not stem from the novelty or articulable message of the final work.²⁵⁹ As such, the revised standard for evaluating the human authorship requirement should reflect this sentiment. By evaluating the process of creation and the threshold of control, intent, and decision-making power exerted by the author, the Office can adapt to the technological landscape of AI while still ensuring that the originator of the work still satisfies the human authorship requirement. Assessing the procedure of the human author, regardless of whether the "process" of the AI-system is autonomous or one of merely mechanical process, allows the Office to contour the threshold for how much creative control or aesthetic intent must be present for the work to be eligible for protection. Thus, the fears of AI systems eroding the human authorship requirement and/or having substantial harmful, and exploitative effects can be addressed without sacrificing the registration of validly protectable works which possess a requisite level of human authorship.

In these same regulatory policies, which will include prompt-based AI systems as a tool for authorship, a description of the expression of procedural authorial intent should also be included to guide copyright registrars in their evaluation process. The specific language concerning the new standard should emphasize that the authors of AI works provide a detailed description of their process of creation, their creative intent, and any other facts relevant to their showing of authorial control over the AI system. Further, the registers will have discretion in deciding the threshold for how much decision-making control and intent must be present for the requirement to be met. However, the guidance from evaluating the requirement based on *process* will guarantee that the work will not be refused based solely on the face value of it being created by prompt-based AI. Again, even though decision-making control is a key factor in assessing an author's intent, it is not dispositive of copyrightability. In short, the Office's view that a user's lack of control over a prompt-based AI system will no longer negate the copyrightability of works.²⁶⁰ Instead, the analysis will shift from the mechanics of the AI system (i.e., its autonomous production of pixels) to a procedural analysis and

protection) (quoting a response from the American Bar Association Intellectual Property Law Comments in Response to Request for Comments on Intellectual Property Protection for Artificial Intelligence Innovation (84 Fed. Reg. 210 (Oct. 30, 2019))).

²⁵⁹ *Hurley v. Irish-Am. Gay, Lesbian and Bisexual Grp. of Bos.*, 515 U.S. 557, 569 (1995).

²⁶⁰ See REPORT PART 2, *supra* note 5 at 21 (stating the Office's current policy regarding the eligibility of works created using generative-AI is that "[t]here may come a time when prompts can sufficiently control expressive elements in AI-generated outputs to reflect human authorship. If further advances in technology provide users with increased control over those expressive elements, a different conclusion may be called for.").

whether decision-making control is indicative of creative, authorial intent, rather than that singular factor of control being dispositive of copyrightability altogether. In other words, the factor of control should now be centered on the process of the *author*, not the autonomous process of the AI system.

*B. The Copyright Office's Refusals Based on Statutory Requirements
Should Be Given Deference by The Courts*

As discussed in previous sections of this Note, a problem facing any kind of regulatory guidelines/decisions by an executive agency is the overturning of the *Chevron* deference doctrine in *Loper Bright*.²⁶¹ The lack of deference afforded to executive agencies presents the new possibility that their interpretations and regulatory proposals, like the ones proposed in this Note, will be rendered ineffective.²⁶²

With one of the cores of copyright law being its adaptability, a lack of deference to the Office directly impedes the effectiveness of the Office to make such adaptive changes to its evaluation and registration. It impedes on the effectiveness of the Office itself—i.e., if the solution to each unliked refusal by an author is to go to the courts and, as established, there is no clear standard on how much deference is given to the CO opinions concerning a work's statutory requirements, what could result is a spectrum of similarly situated artists experiencing vastly different outcomes.

For example, one court, giving deference to the Office, could rule that an artist's use of AI does not meet the required standard for human authorship and uphold the Office's refusal. However, the same case could be given to a court that *doesn't* give any deference to the Office and rules broadly that the human authorship requirement is met regardless of the amount of AI used in the work.

Given that the purpose of the proposed standards stated above is to ensure the adaptability of copyright law to new technologies, deferring to the Office in their interpretation of the human authorship requirement's scope is imperative to ensuring its effectiveness. Deference to the Office allows for uniformity across all circuits and helps ensure that the Office is the entity guiding the adaptability of its laws.

Because the proposed standards above and their relation to the statutory requirements are ones of adaptability and not ambiguity, it should follow that the Office's decisions are given substantial deference for their opinions on the scope of the two statutory requirements. Though it is uncontested that it has historically been the court's place to interpret ambiguous law, simply

²⁶¹ *Loper Bright Enters. v. Raimondo*, 144 S. Ct. 2244, 412 (2024) (overturning *Chevron*, U.S.A., Inc. v. NRDC, Inc., 467 U.S. 837 (1984)).

²⁶² *Id.*

having a standard, such as the one proposed above, gives discretion to an executive agency and does not equate to the standard being ambiguous. The discretion given to the Office under this Note's proposed standard for evaluation ensures that the Office continues to promote the progress of copyright law and guarantees that its standards continue to promote the historical principle of adaptability in copyright law.

As such, if a case were to be tried in the court system wherein a refusal has been made based on a work not satisfying either: (1) the originality requirement,²⁶³ or (2) the human authorship requirement,²⁶⁴ the court should give deference to the Office's opinion and their boundaries specifically concerning the scope of the human authorship requirement for works containing AI. Affording the Office with substantial deference will guarantee some level of uniformity across all circuits and will allow the Office to be the one choosing when and how to adapt copyright law, not the courts.

IV. CONCLUSION

The introduction of AI and its exponential increase in accessibility necessitate a change in copyright law. Historically, the Office and court system have continued to adapt the governing standards to tailor them to the introduction of new technologies. The current governing standards, however, are overinclusive and, though they protect against the possibility of harm from the use of AI in new works, are not sufficiently tailored to accommodate the changing technological landscape. Without action from the Office, the denial of seemingly valid and protectable works will increase, and so too the discouragement of the progress of arts, sciences, and future authors. As such, in accordance with the core principle of adaptability inherent in copyright law, the Office must contour its regulatory guides to accommodate prompt-based AI works. Further, once such contouring takes place, the judiciary must give substantial deference to refusals centered on the statutory requirement of human authorship to ensure uniformity across all circuits and courts. These changes, though possibly accompanied by further litigation, ensure that the regulations will not be overinclusive while still safeguarding authors against the monopolization of prompt-based AI systems in the copyright world.

²⁶³ See *Feist Publ'ns v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991) (discussing the originality requirement for writings to be eligible for copyright protection).

²⁶⁴ See discussion *supra* Section II.B.