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ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY: PART III-
IP PROTECTION FOR AI ASSISTED INVENTIONS AND CREATIVE WORKS

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I. Introduction

Chairman Issa, Ranking Member Johnson, Members of the Committee, thank you for the invitation to testify today. I am honored to share my thoughts on IP PROTECTIONS FOR AI-ASSISTED INVENTIONS AND CREATIVE WORKS with the Subcommittee. My views are purely my own. I do not represent anyone on these issues, not even the clients I work for in the Arts & Entertainment Advocacy Clinic I established at George Mason University’s Scalia Law School.

I will limit my comments to authorship of creative works. Some of the views I will share are based on a research project I am currently conducting. I am interviewing visual artists who use Generative Artificial Intelligence (“GAI”) in their art-making practices to understand how — if at all — the ethical use of such tools affects artists’ originality, creativity, productivity, and collaboration with other human artists and collaborators. That work is not yet concluded, so my thoughts on the subject are evolving. I hope you will allow me to remain in dialogue with you as you engage in these important deliberations and as my research proceeds.

With those caveats, please allow me to summarize my views.

- We should evaluate creativity and originality — the core questions when determining copyrightability of creative works — by looking mainly to the acts of the human author, rather than to the output of the GAI. The question is whether the use of the GAI is undermining a claim to human authorship, or whether the GAI is being used to extend a human author’s authentic vision for the creative work. Applying this approach, at least some creative works authored by humans using the assistance of GAI will be protectable by copyright.
- I make this assertion setting aside — for the moment — the crucially important question of liability for the training of the GAI itself. Respect for the IP rights of creators in training GAI models is a necessary element in any discussion concerning IP protection for the creative works made by users of such tools. However, denying copyright to authors of works created with the assistance of GAI if the work is otherwise sufficiently original to qualify for protection will do nothing to address lack of respect for IP rights by those who develop and train GAIs. To the contrary, denying copyright to human authors who use GAI in their art making will merely prevent creative workers from being able to claim copyright in expressive works based on the media/tools they choose to work with — relegating their works to the category of synthetic data and foreclosing the opportunity to control or be compensated for use of their works.¹
- Creating a class of unprotectable synthetic data would be a windfall to GAI companies because such uncopyrightable synthetic data would immediately become available for GAI training without the need for any permissions from the human creator who used the GAI to make the creative work. This exploits creative workers on both the input side (by

¹ Cade Metz, Cecilia Kang, Sheera Frenkel, Stuart A. Thompson and Nico Grant, *How Tech Giants Cut Corners to Harvest Data for A.I.* N.Y. Times (April 6, 2024), <https://www.nytimes.com/2024/04/06/technology/tech-giants-harvest-data-artificial-intelligence.html>.

not protecting copyright in the initial materials the GAI is trained on) and on the output side (by not protecting copyright in the expressive works created by humans using the GAI in their authorship).

- Maybe not all AI-assisted creative works should be protectable, but some surely should be. The spark of creativity test for originality from *Feist*² should not be disturbed. It can readily be adapted to fit the GAI authorial workflow.
 - *Feist* teaches that originality is “the touchstone” and “bedrock principle” of copyright.³
 - But “[t]he mere fact that a work is copyrighted does not mean that every element of the work may be protected. Originality remains the *sine qua non* of copyright; accordingly, copyright protection may extend only to those components of a work that are original to the author.”⁴
 - This means that to determine originality the inquiry must turn on the creative acts of the author – in the context of AI assisted creative works, the question is *what creative acts has the human author taken?*
 - In *Feist* the Supreme court distinguished creative acts from mere sweat-of-the-brow effort, but did not set a particularly high bar – it required only that authors demonstrate a minimal level of creativity.⁵
 - *Feist* should continue to apply in the context of AI-assisted creative works. The proper interpretation of *Feist* in this context is not to dissect creative works element-by-element, searching for indications that the human author has demonstrated control or foreseeability over the precise operation of GAI tools. Instead, the Copyright Office and courts should inquire whether the human author has used the GAI as an artist uses any tool or material in their art making practice. Has the artist deployed GAI or engaged it authentically and in their own voice — in a manner that demonstrates the artist is staying true to their creative vision?⁶
 - Decisions concerning originality and ultimate copyrightability may be made based upon the contours of the whole project and may vary depending on the type of work. I look forward to exploring this test and its outcomes further this morning.
- As noted, I begin from the proposition that we should evaluate the acts of the human author rather than the outputs of the GAI. As a consequence, the *de minimis* “disclose and disclaim” guidance regarding GAI currently in use by the Copyright Office troubles me.
 - The Copyright Office guidelines do not marry well with the art-making practices of visual artists I have interviewed.

² *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991).

³ *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 347 (1991).

⁴ *Feist* at 348. Citing Patterson & Joyce 800-802; Ginsburg, Creation and Commercial Value: Copyright Protection of Works of Information, 90 Colum.L.Rev. 1865, 1868, and n. 12 (1990).

⁵ *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 358 (1991) (“Originality requires only that the author make the selection or arrangement independently [...] and that it display some minimal level of creativity”).

⁶ I was inspired to articulate the *Feist* test in the context of GAI authorial workflow this way after reading Hartmut Rosa, *The Uncontrollability of The World* (English edition 2020) (Originally published in German as Unverfügbarkeit (2018)).

- They can lead to needless parsing of works into constituent parts in a manner that is confusing to artists and inconsistent with artists’ intentions for their artworks.
 - Moreover, for some prolific artists — like commercial photographers who already find registration requirements challenging — any additional registration requirement (e.g. requiring disclosure of GAI use or limiting the availability of group registrations of works) may dissuade them from registering works at all.
- Finally, although I raise concerns about the Copyright Office’s disclosure requirements pertaining to the registration of AI-assisted creative works, I do not mean to conflate those requirements with the separate transparency requirements being proposed by some parties related to the use of AI technology to deceive or to mislead. Nor do I mean to address proposals related to transparency concerning the nature and composition of training sets used to train generative AI models. Both of these are laudable efforts.
 - Encouraging transparency related to AI use is important to many types of authors of creative and scientific works in order to encourage reliable and trustworthy interactions. Actors, performers and ultimately even private citizens may also demand transparency regarding AI use to ensure their names, images and likenesses are not misappropriated by deepfakes. However, policy lines should continue to be drawn carefully so that authors of expressive works can continue to deploy GAI to create special effects in films and television, modify sound recordings, embellish works of visual art, and otherwise entertain audiences in ways that incorporate groundbreaking technologies. Nuanced distinctions may have to be drawn to establish requirements for different use scenarios in order to accommodate all of the legitimate interests expressed by the affected parties.

The remainder of my testimony proceeds by suggesting answers to a series of legal and policy questions that may be helpful to consider when making decisions about authorship and AI.

II. Discussion

Question 1: What is Generative AI?

When discussing new technologies, one commonly begins by defining terms. The Copyright Office has defined GAI for purposes of its Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence (“registration guidance”)⁷ and in its Notice of Inquiry on Artificial Intelligence and Copyright (“NOI”) as technology that can create new content including text, images, and music (including generating voices) that would be protected by copyright if created by a human being.⁸

Whether creative works produced by humans with the assistance of AI technology deserve copyright protection is a question about authorship and originality — not one primarily

⁷ *Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence*, 88 FR 16190 (Mar. 16, 2023) (to be codified at 37 C.F.R. § 202). https://copyright.gov/ai/ai_policy_guidance.pdf.

⁸ *Artificial Intelligence and Copyright*, 59942 Fed.Reg. Vol. 88, No. 167 (proposed Aug. 30, 2023).

about technology. Thus, it may not be necessary — and indeed may prove counterproductive⁹ — to focus on technology definitions at this juncture. Copyright has accommodated and adjusted to the introduction of new technologies since the drafting of the Constitution. In doing so the law has been most effective when it aimed to remain technology neutral, rather than when it sought to anticipate and define new technological developments in legislative and regulatory enactments.¹⁰ Accordingly, rather than debate how broadly or narrowly to define GAI in order to regulate particular tools, if Congress wishes to determine whether creative works authored by humans with the assistance of GAI merit copyright protection, it should ask the following question:

*Question 2: Is the use of the GAI undermining a claim to original human authorship, or is the GAI being used to advance a human author’s authentic vision for their creative work?*¹¹

Congress should continue to focus its attention on the authorial activities of human authors, not on the specific technologies those authors are using to create. This is within Congress’ constitutional mandate.

The Constitution allows Congress to protect the “writings” of “authors.”¹² Congress has elected to do so by incorporating common law standards for originality into the Copyright Act without change.¹³ The locus of originality has always been the author’s imprint on the work. Two late nineteenth-century Supreme Court decisions explain the requirement for and framework of protections for creative works under the Constitution.¹⁴ In the *Trade-Mark Cases*, the Supreme Court distinguished copyrighted writings from trademarks.¹⁵ To be classified as a copyrightable writing of an author, a work must be “*original*, and . . . founded in the creative powers of the mind. The writings which are to be protected are *the fruits of intellectual labor*.”¹⁶

⁹ See e.g., Audio Home Recording Act of 1992 (now largely a technological dead letter, but still codified in the Copyright Act) https://www.copyright.gov/licensing/sec_1003.html, see also S.Rep. 105-190 at 2 (1998) (“Copyright laws have struggled through the years to keep pace with emerging technology”), H.R. Rep. 94-1476 at 51 (1976) (“Authors are continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressions will take”) (“Section 102 implies neither that that subject matter is unlimited nor that new forms of expression [...] would necessarily be unprotected”).

¹⁰ E.g. *American Broadcast Companies, Inc. v. Aereo, Inc.*, 573 U.S. 408, 446-48 (2014).

¹¹ I have written and lectured about originality and authorship with particular reference to visual artworks in various settings. Most recently when I was invited to deliver the Christopher A. Meyer Memorial Lecture in 2022 at the invitation of the former partners of Mr. Meyer, the United States Copyright Office, the Copyright Society of the U.S.A. and the George Washington University School of Law. I expanded on the themes in that lecture in an article published by Vanderbilt Law School’s Journal of Entertainment and Technology Law in 2023. See Sandra M. Aistars, *Copyright’s Lost Art of Substantial Similarity*, 122 VAND. J. ENT. & TECH. L. 109 (2023). I quote the relevant portion of that article here more or less in its entirety. See also Lee, Edward, Prompting Progress: Authorship in the Age of AI (October 22, 2023). Florida Law Review, Vol. 76, 2024 Forthcoming, Available at SSRN: <https://ssrn.com/abstract=4609687> or <http://dx.doi.org/10.2139/ssrn.4609687> (Applying the analysis in the AI context).

¹² U.S. CONST. art. I, § 8, cl. 8.

¹³ H.R. REP. NO. 94-1476, at 51 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5664 (“This standard does not include requirements of novelty, ingenuity, or aesthetic merit, and there is no intention to enlarge the standard of copyright protection to require them.”).

¹⁴ See *In re Trade-Mark Cases*, 100 U.S. 82, 94 (1879); *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

¹⁵ See 100 U.S. at 93–94.

¹⁶ *Id.* at 94.

A few years later, the Supreme Court further amplified the importance of the author's imprint on a work when opining on the copyrightability of photographs. *Burrow-Giles v. Sarony* probed the tensions between authorship and technology use.¹⁷ Sarony alleged that a lithographic company infringed his rights in a photograph of Oscar Wilde.¹⁸ The case established that, when an author makes sufficient authorial expression in a photograph, the photograph can be protectable under copyright.¹⁹ The defense argued that extending copyright protections to photographs was unconstitutional because photographs are neither "writings" nor the productions of "authors," but are rather mere mechanical reproductions of the physical features of an object that involve no originality of thought.²⁰ The Supreme Court disagreed, finding 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."²¹ It noted, however, that "ordinary" photographs might not enjoy copyright protection.²²

Photographer Sarony's narrative of the process of creation convinced the Court that he was an author and that his photograph was an original intellectual conception worthy of protection.²³ In the Court's retelling, using words taken straight from Sarony's brief, he "made" the photograph entirely from his own mental conception.²⁴ He gave this conception visible form by posing Oscar Wilde in front of the camera, selecting and arranging the costume, draperies, and other accessories in the photograph.²⁵ He also arranged the subject to present graceful outlines, modulated the light and shade to evoke the desired expression, and "from such disposition, arrangement, or representation, made entirely by plaintiff, he produced the picture in suit."²⁶

The court's commentary on the "useful," "harmonious," and "graceful" nature of the picture,²⁷ and on the plaintiff's work conducted "entirely from his own original mental conception," contrasts markedly with the *Trade-Mark Cases*'s language explaining why trademarks are not original.²⁸ It was because the lower court took the time to understand how the artist made the artwork that the Supreme Court was equipped to elevate Sarony's photograph of Wilde above "ordinary" photographs and deem it protectable under copyright.²⁹

Justice Oliver Wendell Holmes, Jr. built on Sarony when he ruled that circus posters are protectable as "pictorial illustrations or works connected with the fine arts" in *Bleistein v.*

¹⁷ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 57-58 (1884).

¹⁸ *Id.* at 54-55.

¹⁹ *See Id.* at 54-55, 58.

²⁰ *Id.* at 54, 59.

²¹ *Id.* at 58.

²² *Id.* at 59.

²³ *Id.* at 55.

²⁴ Terry Kogan, *The Enigma of Photography, Depiction, and Copyright Originality*, 25 FORDHAM INTELL. PROP., MEDIA & ENT. L.J. 869, 887-88 (2015).

²⁵ *Burrow-Giles*, 111 U.S. at 60.

²⁶ *Id.*

²⁷ *Id.* at 54.

²⁸ *In re Trade-Mark Cases*, 100 U.S. 82, 94 (1879).

²⁹ *Burrow-Giles*, 111 U.S. at 60.

*Donaldson Lithographing Co.*³⁰ Courts use *Bleistein*, problematically, as an excuse to avoid apprehending artworks before them due to the famous “dangerous undertaking” quote:

It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits. At the one extreme, some works of genius would be sure to miss appreciation. Their very novelty would make them repulsive until the public had learned the new language in which their author spoke. It may be more than doubted, for instance, whether the etchings of Goya or the paintings of Manet would have been sure of protection when seen for the first time. At the other end, copyright would be denied to pictures which appealed to a public less educated than the judge.³¹

In truth, the case simply counsels judges not to inject their personal biases into copyright rulings.³² It thus establishes a minimalist approach to the originality requirement in U.S. copyright law, recognizing commercial and other “low art” expression as copyrightable.³³

Justice Holmes ruled that a work is protectable if it manifests the author’s own perception of and reaction to the world.³⁴ At the same time, because the test is based on the author’s personality, others are free to represent the same object or scene in their own authorial voice.³⁵ Under this personality-based test, whether the author depicted or “copied” objects from real life did not matter:

The copy is the personal reaction of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one man’s alone. That something he may copyright unless there is a restriction in the words of the act.³⁶

By basing originality decisions on an assessment of whether the artist has manifested personality in a work, Holmes gave judges a way to avoid the “dangerous undertaking” of injecting personal bias when evaluating originality.³⁷

Applying these teachings in the context of GAI is straightforward.

- If a work created with the assistance of GAI is the product of an author’s own intellectual conception, it should enjoy copyright protection.³⁸
- Like the photographer *Sarony*, a modern author using GAI should be able to persuade a court that a creative work made using the assistance of GAI is copyrightable by describing the creative process the author used to create the

³⁰ *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251–52 (1903) (quoting Copyright Acts, ch. 301, § 3, 18 Stat. 78, 79 (1874) (current version at 54 Stat. 106)).

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.* at 250.

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.* at 251–52.

³⁸ *See Sarony* at 60.

work. This might include how the author conceived of, researched and planned the work, a description of how the author contributed essential elements to the work’s creation, and/or gave the work its fixed form. Such statements should not be required merely to record a registration of copyright, however.

- Recalling Justice Holmes’ wise counsel in *Bleistein*, judges (and the Copyright Office) should avoid injecting personal biases into copyright decisions. Denying copyright to human creators who extend their creative reach through the use of GAI tools could suggest such bias.
- *Bleistein* also points to the importance of human intellectual effort when the case refers to authors manifesting their personality in a work. The relevant inquiry in the context of authors using GAI is whether the author used GAI authentically, creating a work in their own voice, staying true to their creative vision.

Question 3: Are there any limits to permissible GAI use beyond which copyright registration should not be permitted?

It is generally accepted that only human authors can create original works of authorship. Thus, a work should show at least a modicum of human originality to be registered as copyrightable. The Copyright Office [denied the copyright registration application](#) of Dr. Stephen Thaler, creator and owner of the “Creativity Machine,” for the two-dimensional work “A Recent Entrance into Paradise.” Thaler claimed the work was autonomously created by the GAI.³⁹

The Supreme Court in *Feist* tells us that the term “original” means that the work was created independently by an author — without copying another’s work — and “that it possesses at least some minimal degree of creativity.”⁴⁰ If we accept the definition of the term “author” as it exists in canonical copyright caselaw, a GAI does not fit within the definition of author.

Sarony defines an author as “he to whom anything owes its origin, originator, maker, one who completes a work of science or literature.”⁴¹ The Copyright Office has historically only registered copyrights in works that were created by human beings.⁴² It traces this approach to the early copyright cases discussed above, which all articulate a nexus between the human mind and creative authorship.⁴³

The foundational Supreme Court cases on authorship are bolstered by more modern case law considering matters such as standing and copyright ownership, which provide depth and substance to the authorship entitlement. For instance, in *Naruto v. Slater*⁴⁴ the Ninth Circuit

³⁹ *Thaler v. Perlmutter*, ___ F.Supp.3d __ 2023 WL 5333236 (D.C. Cir. 2023), *appeal docketed*, No.23-5233 (D.C. Cir. 2023), <https://www.copyright.gov/rulings-filings/review-board/docs/a-recent-entrance-to-paradise.pdf>, (Thaler exhausted his administrative appeals and is currently suing the Copyright Office in federal court to appeal this decision.) (Note that the *Zarya of the Dawn* registration reconsideration, and all other policy decisions made by the Copyright Office on GAI related registration matters have been made with this litigation as a backdrop).

⁴⁰ *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991).

⁴¹ *Burrow-Giles Lithographic Co. v. Sarony*, 111 US 53, 57-59, (1884).

⁴² U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 306 (3d ed. 2021).

⁴³ *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991) (citing Trade-Mark Cases, 100 U.S. 82 (1879)); *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

⁴⁴ *Naruto v. Slater*, 888 F.3d 418 (9th Cir. 2018).

considered whether a monkey had standing to sue for relief from copyright infringement.⁴⁵ Naruto was a six-year-old crested macaque monkey which, upon encountering wildlife photographer David Slater’s unattended camera equipment, pushed the shutter release and took many selfies.⁴⁶ The photos were published in a book called *Monkey Selfies*.⁴⁷ The controversy began when the highly amusing photos made their way online, went viral, and eventually were posted to Wikipedia. Slater asserted his ownership of the images and unsuccessfully tried to get Wikipedia to take the photos down.⁴⁸ Wikipedia refused, claiming the photos were in the public domain because of the human authorship requirement.⁴⁹ Largely uninterested in the niceties of copyright, but pursuing its broader animal rights agenda, People for the Ethical Treatment of Animals (PETA) sued Slater as Naruto’s next friend, arguing that Naruto was the rightful copyright owner of the selfies.⁵⁰ PETA claimed authorship is a sufficiently broad concept to encompass any original work, including the selfies created by Naruto.⁵¹ The case was dismissed by the district court relying on controlling precedent that Congress could explicitly take the extraordinary step of authorizing animals to sue but had not done so in the Copyright Act, thus indicating it was not their intent.⁵² Undeterred, PETA appealed, and after an oral argument that by all reports favored Slater, the parties nevertheless settled.⁵³ Slater reportedly pledged 25% of the Naruto photo fees to charity, and the parties jointly requested the court to vacate the judgment of the district court.⁵⁴

In an unusual move, the Ninth Circuit affirmed dismissal of the case and issued an opinion over the objections of the settling parties — Slater and PETA (not Naruto) — questioning PETA’s ability to represent Naruto, among other concerns.⁵⁵ The case is cited by the Copyright Office in registration refusals for the proposition that “a monkey cannot register a copyright in photos it captures with a camera because the Copyright Act refers to an author’s ‘children,’ ‘widow,’ ‘grandchildren,’ and ‘widower,’ — terms that “all imply humanity and necessarily exclude animals.”⁵⁶

Also relevant to understanding the boundaries between human and non-human authorship is *Urantia Foundation v. Maaherra*.⁵⁷ In *Urantia Foundation*, the question before the court was whether a plaintiff owned a valid copyright in a book that both plaintiff and defendant believed

⁴⁵ *Id.* at 420.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ Andres Guadamuz, *Can the monkey selfie case teach us anything about copyright law?*, WIPO MAGAZINE (Feb. 2018), https://www.wipo.int/wipo_magazine/en/2018/01/article_0007.html (last accessed April 7, 2024).

⁴⁹ *Id.*

⁵⁰ *Naruto*, 888 F.3d at 420.

⁵¹ *See id.* at 425-26.

⁵² *Naruto v. Slater*, No. 15-cv-04324, 2016 U.S. Dist. LEXIS 11041, at *8 (N.D. Cal. Jan. 28, 2016).

⁵³ *See Naruto*, 888 F.3d at 421 n.3.

⁵⁴ LOEB & LOEB, *IP/Entertainment Case Law Updates: Naruto v. Slater*, (Apr. 23, 2018), <https://www.loeb.com/en/insights/publications/2018/04/naruto-v-slater> (last visited April 7, 2024).

⁵⁵ *See Naruto*, 888 F.3d 418.

⁵⁶ *See*, U.S. Copyright Office Review Board, *Decision Affirming Refusal of Registration of a Recent Entrance to Paradise* at 5 (Feb. 14, 2022), <https://www.copyright.gov/rulings-filings/review-board/docs/a-recent-entrance-to-paradise.pdf> (citing *Naruto v. Slater*, 888 F.3d 418, 426 (9th Cir. 2018)).

⁵⁷ *Urantia Found. v. Maaherra*, 114 F.3d 955 (9th Cir. 1997).

was authored — at least in part — by celestial beings.⁵⁸ The text of the book was received by means of channeling a spirit through a psychiatric patient of the founder of the Urantia Foundation.⁵⁹ The District Court of Arizona held that the renewal of the plaintiff’s copyright was invalid because the work was neither a work for hire nor was the plaintiff the owner of a composite work.⁶⁰ The Ninth Circuit reversed, holding that the selection and arrangement of questions posed by the humans to the celestial beings gave organization and order to the book, thus the selection and arrangement of the book was protectable.⁶¹

Cases about monkey selfies and celestial beings should not be dismissed as trivial or absurd because of their colorful fact patterns. Both cases were appealed to the Ninth Circuit and resulted in adjudicated legal principles useful to understanding the questions posed by GAI-assisted creation. *Naruto* supports the reasoning that a creative work generated solely by a GAI without a creative act of authorship by a human is not entitled to copyright protection. *Urantia Foundation* identifies minimal creative acts, like selection and arrangement of questions, that are sufficient under *Feist* to support a claim of authorship.

Question 4: How does the Copyright Office’s registration guidance on AI square with current artists’ practices incorporating GAI?

The copyright registration guidance issued by the Copyright Office to clarify its practices for examining and registering works that contain material produced using AI technology relies on the correct case law and motivation — i.e., to reward human authorship — but the Office’s approach is at odds with artistic practices, and has resulted in several registration denials that are the focus of intense scrutiny in the authorial community.⁶² The guidance requires authors to disclose and disclaim the use of AI technology if it is more than *de minimis*.⁶³ Dissecting a work into its component parts to disclaim authorship where a GAI has been used to assist or extend the artist’s vision is inconsistent with *Feist*’s minimalist requirement that the author merely demonstrate a creative spark to show originality. Moreover, requiring an author to pick apart and disown parts of their creative work product is confusing, and is contrary to the originaive nature of an artist’s process.

The Copyright Office should instead ask whether the work demonstrates at least a modicum of human creativity. The relevant inquiry is whether an artist is engaging with GAI tools authentically and in their own voice and staying true to the author’s creative vision. As discussed earlier, artists could demonstrate that they are staying true to their creative vision by

⁵⁸ *Id.* at 956.

⁵⁹ *Id.* at 957.

⁶⁰ *Id.* at 956-57.

⁶¹ *Id.* at 959.

⁶² See *Zarya of the Dawn* (VAu001480196) at 2 (U.S. Copyright Office Feb. 21, 2023), <https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>, *SURYAST* (U.S. Copyright Office Dec. 11, 2023) (Final Agency Action) <https://www.copyright.gov/rulings-filings/review-board/docs/SURYAST.pdf>, *Théâtre D’opéra Spatial* (U.S. Copyright Office September 5, 2023) (Final Agency Action) <https://www.copyright.gov/rulings-filings/review-board/docs/Theatre-Dopera-Spatial.pdf>.

⁶³ *Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence*, 88 FR 16190 at 93 (Mar. 16, 2023) (to be codified at 37 C.F.R. § 202). A copy of the guidance is available at https://copyright.gov/ai/ai_policy_guidance.pdf.

describing their creative process just as they describe their motivations and the use of any other tools and materials in their art making processes.

This is not a foreign concept to authors. The artist’s statement is part of many professional as well as personal authorial endeavors. Museums and galleries catalogue artist statements in exhibition catalogues and display them together with artworks on gallery walls. Publishers promote forthcoming books by writers with relevant statements from the authors. Musicians are known to seek out means to speak directly to their fans to give them insights about their music.

There is no reason to believe that *Feist* cannot be applied in a technology-neutral fashion in the context of GAI since neither the Copyright Office nor courts have previously imposed cumbersome, technology-specific registration requirements on authors. They should resist the impulse to do so now as well. Imposing specific requirements to track prompts or other human creative interactions with the GAI that lead to interruptions in an artist’s creative flow could be counterproductive. But an artist is more likely to be able to describe their creative process than to demonstrate control or predictability over a technology tool they have not devised, trained or deployed into the market.

At least one registration claim considered by the Office involved unusual procedural turns that resulted in registration specialists conducting independent research about how GAI technology works, and then taking administrative notice of their own findings in order to decide appeals against the author whose claims for registration had attracted the Office’s notice. The registration claim was *Cancellation Decision Regarding Zarya of the Dawn*.⁶⁴ The artist — Kris Kashtanova — did not explicitly disclose that the work was created with the use of AI technology.⁶⁵ The applicant described the work as a “comic book” and mentioned Midjourney on the cover of the work, listing the human author as the only author on the application.⁶⁶ Kashtanova also did not disclaim any elements of the work as not copyrightable.⁶⁷ The Copyright Office, unaware of the use of AI from the application, issued a registration.⁶⁸ When it later learned that the artist was claiming to have obtained the first registration for an AI work,⁶⁹ the Office initiated cancellation proceedings because according to the Office, by Kashtanova’s own admission, the artist was not the sole author of the entire work, and at a minimum, the claim should have been limited to exclude non-human authorship.⁷⁰

The artist’s lawyers responded to the show cause letter from the Office with a detailed explanation affirming Kashtanova’s authorship of the entire work despite use of Midjourney.⁷¹ The letter describes a “creative, iterative process” of “working with the computer to get closer

⁶⁴ *Zarya of the Dawn* (VAu001480196) at 2 (U.S. Copyright Office Feb. 21, 2023), <https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *See id.* at 14.

⁷⁰ *Id.* at 2-3.

⁷¹ *See id.* at 17-29.

and closer to what [the artist] wanted to express.”⁷² This included “multiple rounds of composition, selection, arrangement, cropping, and editing each image in the Work.”⁷³ Kashtanova’s lawyers assert that Kashtanova’s efforts “make [Kashtanova] the author of the Work, including authorship of each image in the Work.”⁷⁴ They claim that the computer programs Kashtanova used, including the Midjourney image creation service, were but “an assisting instrument” to Kashtanova.⁷⁵ The letter also responds to the press accounts describing the creation of the work as “oversimplified” and assert that the press accounts “improperly characterized the role of the Midjourney service for dramatic effect.”⁷⁶

Kashtanova’s attorneys sought to distinguish their registration application from an earlier (rejected) autonomous AI-created work registration. They explain that “[t]he work embodies Kashtanova’s original conception.”⁷⁷ Kashtanova (1) conceived of the world they desired to create in the graphic novel, (2) constructed sophisticated prompts composed of lengthy word pictures and images created by Kashtanova to generate outputs from the AI, and (3) iteratively refined those outputs until the outputs satisfied the human artist’s creative conception.⁷⁸ Not only the written text of the work but also the structure and content of each image in the book was guided by Kashtanova through conscious and careful construction, unlike the autonomously created work “A Recent Entrance to Paradise.”⁷⁹

Kashtanova argues that the process that they employ is much like that of a photographer, who makes creative decisions to achieve the desired outcome using the tools of their artistic medium.⁸⁰ The prompts used to create the images show Kashtanova’s creativity and influence.⁸¹ These prompts included

- textual prompts that describe the image to create,
- intermediate images suggested/authored by the artist to suggest the layout, textures, or feel desired by the artist,
- masking technology that isolate parts of the image to use (or not) in generation,
- options to constrain aspect ratios or other aspects of the process, and
- options directing the generative process to refine the image.⁸²

In fact, they suggest the textual prompts themselves evidence human authorship and read much like poetry.⁸³

As a fall-back position, Kashtanova’s counsel argued that the work, including the images, are registrable as a compilation.⁸⁴ A work can be formed “by the collection and assembling of

⁷² *Id.* at 18.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.* at 19.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *See id.* at 19-21.

⁷⁹ *Id.* at 20.

⁸⁰ *Id.* at 20-21.

⁸¹ *Id.* at 23.

⁸² *Id.*

⁸³ *Id.* at 25.

⁸⁴ *Id.* at 20.

preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship.”⁸⁵

Finally, Kashtanova argued that the use of computer tools is already permitted by the Copyright Office and that AI should not be treated differently.⁸⁶ This approach opened the door for the Office to consider how generative AI compares with other computer tools already employed by creators. Unfortunately for Kashtanova, the Copyright Office was not convinced that creators exercise similar control over images generated by Midjourney as they do over images generated by or manipulated with other tools.⁸⁷

The Copyright Office determined that the human-authored text was copyrightable, and that when the text and images generated by the AI were combined, they were copyrightable as a compilation; they rejected arguments that the individual images were themselves copyrightable.⁸⁸ In deciding the images were not protectable, the Office relied on canonical caselaw on originality and authorship.⁸⁹ The Office cited *Burrow-Giles Lithographic Co. v. Sarony* for the principle that photographs are protectable when they are “representatives of original intellectual conceptions of the author,” defining author as “he to whom anything owes its origin, originator, maker, one who completes a work of science or literature.”⁹⁰ The Copyright Office highlighted language in the caselaw that underscored the need for “novelty, invention, or originality” for copyright to subsist.⁹¹ The Office also relied on *Urantia Foundation v. Maaherra* described above.⁹² In *Urantia Foundation*, the Ninth Circuit held that “some element of human creativity must have occurred in order for the Book to be copyrightable” because “it is not creations of divine beings that the copyright laws were intended to protect.”⁹³

Based on this caselaw, the Copyright Office determined that the work was entitled to protection both for the unaided written elements and the selection and arrangement as a compilation by the human artist.⁹⁴ First, the text of the work is copyrightable because it is written entirely by Kashtanova without the help of any tool including the AI program, so it is the product of human authorship.⁹⁵ It also contains more than the “modicum of creativity” required by *Feist*, so it is protectable.⁹⁶ Second, the selection and arrangement of the images and text are protectable as a compilation because the selection and arrangement was done entirely by Kashtanova and is sufficiently creative to be protectable.⁹⁷ Specifically, the Copyright Office found that the “selection of the images that make up the work and the placement and

⁸⁵ *Id.* (quoting 17 U.S.C. §101).

⁸⁶ *Id.* at 27.

⁸⁷ *Id.* at 9.

⁸⁸ *See id.* at 1-12.

⁸⁹ *See id.* at 3-4.

⁹⁰ *Id.* at 3 (quoting *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 57-59 (1884)).

⁹¹ *Id.* at 3-4 (quoting *Burrow-Giles Lithographic Co.*, 111 U.S. at 59).

⁹² *Id.* at 4.

⁹³ *Id.* (quoting *Urantia Found.*, 114 F.3d at 957-59).

⁹⁴ *Id.* at 4-5.

⁹⁵ *Id.* at 4.

⁹⁶ *Id.* (citing *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991)).

⁹⁷ *Id.* at 5.

arrangement of the images and text on each of the Work’s pages” to be a product of Kashtanova’s creative choices and therefore protectable as authorship.⁹⁸

The Copyright Office cancelled the registration of the images themselves.⁹⁹ It did so after taking the unusual step of conducting an independent investigation of how Midjourney works.¹⁰⁰ The Office does not ordinarily embark on its own investigation of facts to confirm representations made in applications.¹⁰¹ In this case, however, the Copyright Office noted that it “‘may take administrative notice of facts or matters that are known by the Office or the general public,’ to evaluate an application that appears to be based on inaccurate or incomplete information.”¹⁰² The Office’s conclusions differ significantly from what was presented by Kashtanova’s attorneys. The Copyright Office concludes that the image generation process is far more rudimentary and automated than Kashtanova’s artist statement suggests.¹⁰³ Specifically, the Office concludes that it is not possible to predict what the tool will create ahead of time based on a prompt, and that therefore “the process by which a Midjourney user obtains an ultimate satisfactory image through the tool is not the same as that of a human artist, writer, or photographer.”¹⁰⁴ Because the Copyright Office determined that the process is different, it determined that “guid[ing]” the AI establishes the AI itself as the originator of the “traditional elements of authorship” in the images.¹⁰⁵

The decision has proven controversial among artists and designers who use AI tools in their work. They disagree with the Copyright Office’s understanding of how artists create using AI tools, and question whether the Office fully considered the history of using tools to generate elements of authorial works that artists modify and incorporate in their work to a greater or lesser degree. Consider, for instance, random scene and character prompts used by authors to begin their own writing process,¹⁰⁶ or the copyrightability of computer-generated art beginning in the 1960s.¹⁰⁷ The prompt used by the Copyright Office to test Midjourney — “imagine cute baby dinosaur Shakespeare writing play purple”¹⁰⁸ — is also quite different from the poetic, longer, and more complicated prompts that Kashtanova claims to have used to direct the GAI. Moreover, Kashtanova paired their prompts with an intermediate image, previously created by the artist.¹⁰⁹ It is no wonder then that the Copyright Office’s results yielded results that were less specific and more pedestrian than Kashtanova’s rather more refined input:

⁹⁸ *Id.*

⁹⁹ *Id.* at 12.

¹⁰⁰ *Id.* at 5.

¹⁰¹ *Id.* at 5 n.8.

¹⁰² *Id.* (quoting COMPENDIUM (THIRD) § 602.4(C)).

¹⁰³ *See id.* at 6-8.

¹⁰⁴ *Id.* at 8.

¹⁰⁵ *Id.*

¹⁰⁶ *See, e.g., Writing Prompt Generator*, SERVICESCAPE, <https://www.servicescape.com/writing-prompt-generator> (last visited April 7, 2024); *The Most Dangerous Random Prompt Generator*, SQUIBLER, <https://www.squibler.io/random-prompt-generator> (last visited April 7, 2024).

¹⁰⁷ *See* A. Michael Noll, *The Beginnings of Computer Art in the United States: A Memoir*, 27 LEONARDO 39, 39-40 (1994).

¹⁰⁸ *Zarya of the Dawn* (VAu001480196) at 7 (U.S. Copyright Office Feb. 21, 2023), <https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>.

¹⁰⁹ *See id.* at 25.

*sci-fi scene future empty New York, Zendaya leaving gates of Central Park and walking towards an empty city, no people, tall trees, New York Skyline forest punk, crepuscular rays, epic scene, hyper realistic, photo realistic, overgrowth, cinematic atmosphere, ethereal lighting.*¹¹⁰

Kashtanova’s lawyers have criticized the Copyright Office’s approach as applying the wrong legal standard: “The standard is whether there is a modicum of creativity, not whether Kashtanova could ‘predict what Midjourney [would] create ahead of time.’ In other words, the Office is incorrectly focusing on the *output of the tool* rather than the *input from the human*.”¹¹¹

The Copyright Office provides details of several other rejections of interest to the creative community on its website.

- On September 5, 2023, the Copyright Office published its [review board opinion](#) rejecting the registration application of Jason Allen for the work “Théâtre D’opéra Spatial.”¹¹² The work achieved notoriety by winning the Colorado State Fair Fine Art Competition in 2022. The author used at least 624 prompts and revisions to achieve the initial version of the work using Midjourney. Allen then moved the work to another platform — Adobe Photoshop — to continue to edit the image in order to remove flaws and improve visual content. He also used Gigapixel AI to resize the image — upscaling it to increase resolution and size. The Copyright Office declined to register Allen’s copyright interest because the author refused to disclaim the original work created via the interactive prompting of Midjourney in the copyright application. Doing so would have yielded a more limited registration protecting copyright only in the alterations made using photoshop and Gigapixel AI.
- On December 11, 2023, the Copyright Office published its [review board opinion](#), rejecting the registration application filed to register a 2-D image titled “Suryast.”¹¹³ The application was filed by Ankit Sahni, who listed himself and his AI machine, RAGHAV Artificial Intelligence Painting App, as co-authors. Sahni has filed registration applications for the same image in India listing the AI as a co-author. The application was initially accepted in India but is subject to a withdrawal and review process. The Office concluded that the image was not a product of human authorship because Sahni did not provide the expressive elements necessary for the pictorial authorship. Although Sahni claims he provided the base input image (which was a photo he had taken himself), a style image, and supplied the necessary values to have the AI generate the amount of style to transfer to the final image, the Copyright Office found that his inputs did not

¹¹⁰ *Id.*

¹¹¹ Van Lindberg, *Recognizing AI-Assisted Art: The Copyright Office is Using the Wrong Legal Standard*, IPWATCHDOG (Feb. 25, 2023, 12:15 PM), <https://ipwatchdog.com/2023/02/25/recognizing-ai-assisted-art-copyright-office-using-wrong-legal-standard/id=157072/#:~:text=Van%20Lindberg&text=%E2%80%9CThe%20standard%20is%20whether%20there,t he%20input%20from%20the%20human.%E2%80%9D> (last accessed April 7, 2024).

¹¹² Théâtre D’opéra Spatial (U.S. Copyright Office September 5, 2023) (Final Agency Action) <https://www.copyright.gov/rulings-filings/review-board/docs/Theatre-Dopera-Spatial.pdf>.

¹¹³ SURYAST (U.S. Copyright Office Dec. 11, 2023) (Final Agency Action) <https://www.copyright.gov/rulings-filings/review-board/docs/SURYAST.pdf>.

control how the expressive elements appeared in the output and therefore did not amount to copyrightable contributions.

Question 5: Who decides these matters?

The Copyright Office has statutory authority to record copyright registrations and advise Congress and inform the public on issues relevant to this inquiry.¹¹⁴ The Office is taking this mandate seriously and has created a new webpage on the issue of Copyright and Artificial Intelligence with resources available to users for their reference.¹¹⁵ The Office has held listening sessions with affected creator communities,¹¹⁶ hosted and published an informational webinar on registration issues pertaining to GAI,¹¹⁷ and issued a wide-ranging Notice of Inquiry on issues arising from the development and use of GAI,¹¹⁸ in response to which it reports it received approximately 10,000 comments.¹¹⁹ It is preparing to release multiple reports this year as a result.¹²⁰

The United States Patent and Trademark Office (USPTO) also has a copyright division. It sits within the Executive Branch and, together with the Copyright Office, advises the Administration on copyright matters.¹²¹ The USPTO plays no direct role in registration of creative works, however. It has issued a guidance document pertaining to the use of GAI by inventors, but that guidance is not directly relevant to creative works.¹²²

As described above, the Copyright Office is responding to registration applications submitted by authors — including by interpreting and upholding the Copyright Act within the scope of its mission.¹²³ If a registration applicant disagrees with the Office’s interpretation of the law and the resulting registration decision, they may exhaust their administrative appeals and

¹¹⁴ Title 17 U.S.C. §§ 701, 705, 706, 707, *see also Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence*, 88 Fed. Reg. 16,190-91.

¹¹⁵ *Copyright and Artificial Intelligence*, U.S. COPYRIGHT OFFICE, <https://copyright.gov/ai/?locl=eanco> (last visited April 6, 2024).

¹¹⁶ *Spring 2023 AI Listening Sessions*, U.S. Copyright Office, Transcripts of these sessions are available at <https://www.copyright.gov/ai/listening-sessions.html> (last visited April 6, 2024).

¹¹⁷ Transcript and recording of the registration webinar available at <https://www.copyright.gov/events/ai-application-process/> (last visited April 6, 2024).

¹¹⁸ *Artificial Intelligence and Copyright*, 59942 Fed.Reg. Vol. 88, No. 167 (proposed Aug. 30, 2023).

¹¹⁹ U.S. Copyright Office, *Copyright and Artificial Intelligence Webpage*, <https://www.copyright.gov/ai/> (last accessed April 7, 2024), *see also* Letter from Shira Perlmutter, Reg. of Copyrights, to Sen. Chris Coons, Chair, and Sen. Thom Tillis, Ranking Member, Subcomm. on Intell. Prop., Rep. Darrell Issa, Chair, and Rep. Henry C. “Hank” Johnson, Ranking Member, Subcomm. on Courts, Intell. Prop., and the Internet (Feb. 23, 2024), <https://copyright.gov/laws/hearings/USCO-Letter-on-AI-and-Copyright-Initiative-Update-Feb-23-2024.pdf>.

¹²⁰ Cecilia Kang, *The Sleepy Copyright Office in the Middle of a High-Stakes Clash Over A.I.*, N.Y. Times, January 25, 2024 (updated January 26, 2024) <https://www.nytimes.com/2024/01/25/technology/ai-copyright-office-law.html> (last accessed April 7, 2024).

¹²¹ *See* U.S. Patent and Trademark Office website <https://www.uspto.gov/about-us> (last visited April 7, 2024), *also see* <https://www.uspto.gov/ip-policy/copyright-policy> (last visited April 7, 2024).

¹²² *Inventorship Guidance for AI-Assisted Inventions*, 89 Fed.Reg. 10043 (Feb. 13, 2024).

¹²³ *See, e.g., Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence*, 88 Fed. Reg. 16,190 (Mar. 16, 2023) (to be codified at 37 C.F.R. § 202).

then appeal the decision in federal court.¹²⁴ When courts hear challenges of copyright registration decisions, issues concerning originality doctrine may be implicated.¹²⁵ Issues related to originality and copyrightability of works may also be raised in infringement litigation concerning the design, use and training of GAI tools between private parties.¹²⁶

Congress could —if it wished — also make new laws responding to GAI including by crafting entirely new frameworks for considering GAI created works. Should private parties be unhappy with the results of any judicial or regulatory outcome they may choose to pursue legislation. Various parties may also choose to pursue legislation immediately as a more direct path to success. I have no opinion on the wisdom or appropriateness of any particular legislative strategy at this moment.

Question 6: Are the controversies that may end up before the courts real cases and controversies, involving real creator interests?

It has been noted that the current debates regarding AI Authorship at the Copyright Office arose entirely or in part because the inventor or artist initiating the matter wanted to set a precedent for registering works using AI technology.¹²⁷ Dr. Ryan Abbott, part of the legal team for Dr. Thaler — owner of the Creativity Machine discussed earlier — stated in a webcast interview shortly before filing the pending federal lawsuit against the Copyright Office that his client’s intention had been to provoke a rejection and to exhaust all administrative appeals at the Copyright Office so that the team could file a federal lawsuit to challenge the human authorship requirement for copyrightability of AI -created works.¹²⁸ Similarly, Kashtanova wrote on social media that they were motivated by a friend who is a lawyer to make a case that “we do own copyright when we make something using AI”: “My friend gave me this idea and I decided to make a precedent.”¹²⁹ It is neither unusual nor problematic for the law to develop in this manner. Test cases are planned and pursued by parties with interests in important societal issues all the time. How the use of GAI technology affects creator livelihoods is one such issue. The views of all parties concerned deserve a full and fair hearing.

¹²⁴ U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 101, ch. 1700 (3d ed. 2021).

¹²⁵ See, e.g., *Thaler v. Perlmutter*, __ F.Supp.3d __ 2023 WL 5333236 (D.C. Cir. 2023), *appeal docketed*, No.23-5233 (D.C. Cir. 2023). (Thaler exhausted his administrative appeals and is currently suing the Copyright Office in federal court to appeal this decision.) (Note that the *Zarya of the Dawn* registration reconsideration, and all other policy decisions made by the Copyright Office on GAI related registration matters have been made with this litigation as a backdrop).

¹²⁶ See, e.g., *Getty Images (US), Inc. v. Stability AI, Inc.*, Case No. 23-cv-00135 (D. Del. Feb. 3, 2023).

¹²⁷ See Dr. Ryan Abbott, University of Surrey & Prof. Sandra Aistars, George Mason University, Antonin Scalia Law School, *Paradise Rejected: What the Decision to Reject Copyright Registration for an AI-Created Work Imagining an Afterlife Means for AI* (Mar. 17, 2022); Kris.Kashtanova, INSTAGRAM (Sept. 20, 2022), <https://www.instagram.com/p/CivS3iiPigt/>.

¹²⁸ Found at <https://cip2.gmu.edu/2022/03/23/paradise-rejected-a-conversation-about-ai-and-authorship-with-dr-ryan-abbott/> (last visited April 8, 2024).

¹²⁹ Kris.Kashtanova, INSTAGRAM (Sept. 20, 2022), <https://www.instagram.com/p/CivS3iiPigt/> (last visited April 7, 2024).

