UNITED STATES COPYRIGHT OFFICE

Copyright and Artificial Intelligence

Part 1: Digital Replicas

A REPORT OF THE REGISTER OF COPYRIGHTS

JULY 2024

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ABOUT THIS REPORT

This Report by the U.S. Copyright Office addresses the legal and policy issues related to artificial intelligence ("AI") and copyright, as outlined in the Office's August 2023 Notice of Inquiry ("NOI").

The Report will be published in several Parts, each one addressing a different topic. The first Part addresses the topic of digital replicas—the use of digital technology to realistically replicate an individual's voice or appearance. Subsequent Parts will turn to other issues raised in the NOI, including the copyrightability of works created using generative AI, training of AI models on copyrighted works, licensing considerations, and allocation of any potential liability. To learn more, visit www.copyright.gov/AI.

ABOUT THE U.S. COPYRIGHT OFFICE

The U.S. Copyright Office is the federal agency charged by statute with the administration of U.S. copyright law. The Register of Copyrights advises Congress, provides information and assistance to courts and executive branch agencies, and conducts studies on national and international issues relating to copyright, other matters arising under Title 17, and related matters. The Copyright Office is housed in the Library of Congress. Its mission is "to promotes creativity and free expression by administering the nation's copyright laws and by providing impartial, expert advice on copyright law and policy for the benefit of all." For more information, visit www.copyright.gov.

FOREWORD FROM THE REGISTER OF COPYRIGHTS

The recent emergence of sophisticated generative artificial intelligence ("AI") models available for use by consumers constitutes a major leap forward in technology. It presents both exciting opportunities and complex challenges for society as a whole, which have captured the attention of policymakers around the world, as well as the press and the public.

One of the areas affected is intellectual property. Copyright issues in particular have risen to the forefront, due to their visibility, immediacy, and relevance to the average person. By the fall of 2022, millions of Americans were utilizing generative AI systems and services to produce an astonishing array of expressive material, including visual art, text, and music. Almost weekly, tremendous strides have been announced in the technology's capabilities. Artists have harnessed the power of AI to find new ways to express themselves and new ways of connecting with audiences. At the same time, AI-generated deepfakes have proliferated online, from celebrities' images endorsing products to politicians' likenesses seeking to affect voter behavior. Over the past year or so, the resulting debates have intensified, with enthusiasm about the promise of extraordinary technical potential tempered by concern about the impact on individuals' livelihoods and reputations.

AI raises fundamental questions for copyright law and policy, which many see as existential. To what extent will AI-generated content replace human authorship? How does human creativity differ in nature from what AI systems can generate, now or in the future? What does this mean for the incentive-based foundation of the U.S. copyright system? In what ways can the technology serve as a valuable tool to amplify human creativity and ultimately promote science and the arts? How do we respect and reward human creators without impeding technological progress?

For copyright, this is the latest chapter in a symbiotic relationship with technology. Throughout history, technological innovation has shaped the evolution of copyright law and policy, with new forms of expression, such as photography, motion pictures, and computer programs; new methods of copying, such as photocopiers and video-cassette recorders; and new means of distribution, such as radio, television, and the internet. In recent decades, the pace of change has sharply accelerated, and today's generative AI tools have picked it up even further. The late 20th century saw the Copyright Act amended to respond to the challenge of digital networked technology. History has shown that the copyright system is resilient and continues to evolve as needed.

In response to the importance and urgency of the copyright issues, in early 2023 the Copyright Office initiated the study that led to this Report. Our work is just one part of a broader national and global conversation. In the United States, the Biden Administration's

October 2023 Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence addresses how AI technologies can be deployed safely and responsibly while taking into account concerns about fraud, bias, and transparency, as well as the impact on intellectual property rights. Other agencies are examining issues within their own areas of jurisdiction, and Congress is debating the need for legislation. Governments of other countries are similarly grappling with the potential impact of AI in all of its forms.

As with all of the Copyright Office's studies, our analysis is guided by the Constitutional goal of promoting creativity in order ultimately to benefit the public. This requires an appropriate balance, enabling technology to move forward while ensuring that human creativity continues to thrive. It is our hope that this Report will further productive discussions in Congress, the courts, and the executive branch, to help achieve that balance.

Shira Perlmutter
Register of Copyrights and Director
U.S. Copyright Office

PREFACE

In early 2023, the U.S. Copyright Office announced a broad initiative to explore the intersection of copyright and artificial intelligence.

In March of that year, the Office released a policy statement with registration guidance for works incorporating AI-generated content. Over the spring and summer, we hosted a series of online listening sessions, presented educational webinars, and engaged with numerous stakeholders to enhance our understanding of the technology and how it is used, the copyright implications, and the potential impact on businesses and individuals.

These activities culminated in an August 2023 Notice of Inquiry, formally seeking public input on the full range of copyright issues that had been raised. In response, we received more than 10,000 comments representing a broad range of perspectives, including from authors and composers, performers and artists, publishers and producers, lawyers and academics, technology companies, libraries, sports leagues, trade groups and public interest organizations, and even a class of middle school students. Comments came from all 50 states and from 67 countries. That valuable and extensive input, supplemented by additional Office research and information received from other agencies, forms the basis for the discussion and recommendations in this Report.

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EXECUTIVE SUMMARY

This first Part of the Copyright Office's Report on copyright and artificial intelligence ("AI")[1] addresses the topic of digital replicas. From AI-generated musical performances to robocall impersonations of political candidates to images in pornographic videos, an era of sophisticated digital replicas has arrived. Although technologies have long been available to produce fake images or recordings, generative AI[2] technology's ability to do so easily, quickly, and with uncanny verisimilitude has drawn the attention and concern of creators, legislators, and the general public.

As part of a broad AI Initiative, the Copyright Office sought comments on these developments. We asked whether existing laws provide sufficient protection against unauthorized digital replicas or if new protection is needed at the federal level. In response, numerous commenters called for a new federal law to protect individuals from the appropriation of their persona. They provided extensive input into the justifications for and the appropriate parameters of such a law.

In the months since the Office's inquiry was launched, unauthorized digital replicas have continued to make headlines, and have triggered Congressional activity. During this time, we 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. The speed, precision, and scale of AI-created digital replicas calls for prompt federal action. Without a robust nationwide remedy, their unauthorized publication and distribution threaten substantial harm not only in the entertainment and political arenas, but also for private individuals.

Section I summarizes the context and history of the Office's study of the digital replicas issue. Section II.A outlines the main existing legal frameworks: state rights of privacy and publicity, including recent legislation specifically targeting digital replicas, and at the federal level, the Copyright Act, the Federal Trade Commission Act, the Communications Act, and the Lanham Act.

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[1] For purposes of the Copyright Office's Report on Copyright and Artificial Intelligence, "AI" or "Artificial Intelligence" is a general classification of automated systems designed to perform tasks typically associated with human intelligence or cognitive functions. Artificial Intelligence Study: Notice of Inquiry, 88 Fed. Reg. 59942, 59948 (Aug. 30, 2023) ("NOI"). *See also* John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. 115–232, § 238(g)(2), 132 Stat. 1636, 1697–98 (2018) (defining "artificial intelligence" to include systems "developed in computer software, physical hardware, or other context that solves tasks requiring human-like perception, cognition, planning, learning, communication, or physical action").

[2] "Generative AI" refers to applications of AI used to generate outputs in the form of expressive material such as text, images, audio, or video. NOI at 59948–49.

In Section II.B, we explain why existing laws do not provide sufficient legal redress for those harmed by unauthorized digital replicas and propose the adoption of a new federal law. We make the following recommendations regarding its contours:

- Subject Matter. The statute should target those digital replicas, whether generated by AI or otherwise, that are so realistic that they are difficult to distinguish from authentic depictions. Protection should be narrower than, and distinct from, the broader "name, image, and likeness" protections offered by many states.
- Persons Protected. The statute should cover all individuals, not just celebrities, public figures, or those whose identities have commercial value. Everyone is vulnerable to the harms that unauthorized digital replicas can cause, regardless of their level of fame or prior commercial exposure.
- Term of Protection. Protection should endure at least for the individual's lifetime. Any postmortem protection should be limited in duration, potentially with the option to extend the term if the individual's persona continues to be exploited.
- Infringing Acts. Liability should arise from the distribution or making available of an unauthorized digital replica, but not the act of creation alone. It should not be limited to commercial uses, as the harms caused are often personal in nature. It should require actual knowledge both that the representation was a digital replica of a particular individual and that it was unauthorized.
- Secondary Liability. Traditional tort principles of secondary liability should apply. The statute should include a safe harbor mechanism that incentivizes online service providers to remove unauthorized digital replicas after receiving effective notice or otherwise obtaining knowledge that they are unauthorized.
- Licensing and Assignment. Individuals should be able to license and monetize their digital replica rights, subject to guardrails, but not to assign them outright. Licenses of the rights of minors should require additional safeguards.
- First Amendment Concerns. Free speech concerns should expressly be addressed in the statute. The use of a balancing framework, rather than categorical exemptions, would avoid overbreadth and allow greater flexibility.
- Remedies. Effective remedies should be provided, both injunctive relief and monetary damages. The inclusion of statutory damages and/or prevailing party attorney's fees provisions would ensure that protection is available to individuals regardless of their financial resources. In some circumstances, criminal liability would be appropriate.
- Relationship to State Laws. Given well-established state rights of publicity and privacy, the Office does not recommend full federal preemption. Federal law should provide a floor of consistent protection nationwide, with states continuing to be able

to provide additional protections. It should be clarified that section 114(b) of the Copyright Act does not preempt or conflict with laws restricting unauthorized voice digital replicas.

Section III discusses protection against AI outputs that deliberately imitate an artist's style. We acknowledge the seriousness of creators' concerns and identify legal remedies available to address this type of harm. We do not, however, recommend including style in the coverage of new legislation at this time.

The Office appreciates and has benefitted from the extensive and thoughtful comments we received on this important topic. We remain available to assist as Congress continues to consider legislative solutions.

I. INTRODUCTION

In April of 2023, a new song featuring the voices of Drake and The Weeknd drew over fifteen million views on social media and six hundred thousand listens on Spotify.[3] Yet neither artist was aware of the song before its release, because the vocals were unauthorized, AI-generated replicas.[4]

The viral hit "Heart on My Sleeve," commonly referred to as the "Fake Drake" song, is a high-profile example of a burgeoning subgenre of sound recordings using generative AI systems[5] to create vocals that can pass for those of a favorite artist.[6] Vocal tracks are merely one form of increasingly realistic replicas of individuals' voices, images, and artistic styles.[7] In 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.[8] On social media and other internet platforms, their volume has skyrocketed.[9]

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[3] Bill Donahue, *Fake Drake & The Weeknd Song — Made With AI — Pulled From Streaming After Going Viral*, BILLBOARD (Apr. 17, 2023), https://www.billboard.com/pro/fake-ai-drake-the-weeknd-song-pulled-streaming/.

[4] Colin Stutz, *The Fake Drake AI Song Earned Millions of Streams — But Will Anyone Get Paid?*, BILLBOARD (Apr. 19, 2023), https://www.billboard.com/pro/fake-drake-ai-song-earned-millions-streams-get-paid/.

[5] An "AI System" is a software product or service that substantially incorporates one or more AI models and is designed for use by an end-user. NOI at 59948; *see also* James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Pub. L. 117–263, § 7223(4)(A), 136 Stat. 2395, 3669 (2022) (defining "artificial intelligence system" as "any data system, software, application, tool, or utility that operates in whole or in part using dynamic or static machine learning algorithms or other forms of artificial intelligence").

[6] Joe Coscarelli, *An A.I. Hit of Fake 'Drake' and 'The Weeknd' Rattles the Music World*, N.Y. TIMES (Apr. 19, 2023), https://www.nytimes.com/2023/04/19/arts/music/ai-drake-the-weeknd-fake.html.

[7] *See, e.g.*, Melissa Heikkilä, *This Artist Is Dominating AI-Generated Art. And He's Not Happy About It*, MIT TECH. REV. (Sept. 16, 2022), https://www.technologyreview.com/2022/09/16/1059598/this-artist-is-dominating-ai-generated-art-and-hes-not-happy-about-it/; Jane Friedman, *I Would Rather See My Books Get Pirated Than This (Or: Why Goodreads and Amazon Are Becoming Dumpster Fires)*, JANEFRIEDMAN BLOG (Aug. 20, 2023), https://janefriedman.com/i-would-rather-see-my-books-pirated/.

[8] *See* Federal Trade Commission ("FTC") Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2 (Oct. 30, 2023) ("FTC Initial Comments") ("Although policymakers have debated the disruptive potential of AI for decades, the pace of the technology's development and rollout has accelerated in recent years . . . ."); *Fast, Relax, & Turbo Modes*, MIDJOURNEY, https://docs.midjourney.com/docs/fast-relax ("Wait times for Relax are dynamic but generally range between 0–10 minutes per job. . . . Turbo Mode is available for subscribers who want extremely quick image generation. . . . Jobs run in Turbo mode generate up to four times faster. . . .") (last visited July 21, 2024); Karen X. Cheng (@karenxcheng), INSTAGRAM (Apr. 11, 2022), https://www.instagram.com/p/CcN5nBSpO9W/ (demonstrating how to generate an image in seconds using DALL·E).

[9] *E.g.*, Don Philmlee, *Practice Innovations: Seeing is no longer believing — the rise of deepfakes*, THOMSON REUTERS (July 18, 2023), https://www.thomsonreuters.com/en-us/posts/technology/practice-innovations-deepfakes/.

A. AI and Digital Replicas

This Report uses the term "digital replica" to refer to a video, image, or audio recording that has been digitally created or manipulated to realistically but falsely depict an individual. A "digital replica" may be authorized or unauthorized and can be produced by any type of digital technology, not just AI. The terms "digital replicas" and "deepfakes" are used here interchangeably.[10]

Digital replicas may have both beneficial and harmful uses. On the positive side, they can serve as accessibility tools for people with disabilities,[11] enable "performances" by deceased or non-touring artists,[12] support creative work,[13] or allow individuals to license, and be compensated for, the use of their voice, image, and likeness.[14] In one noted example, musician

[10] Although the term "deepfake" is often associated with unauthorized or deceptive uses, especially in explicit imagery, *see infra* notes 22–23, some dictionary definitions are broader. *See deepfake*, MERRIAM-WEBSTER DICTIONARY, https://www.merriam-webster.com/dictionary/deepfake ("an image or recording that has been convincingly altered and manipulated to misrepresent someone as doing or saying something that was not actually done or said") (last updated July 20, 2024); *deepfake*, CAMBRIDGE DICTIONARY, https://dictionary.cambridge.org/us/dictionary/english/deepfake ("a video or sound recording that replaces someone's face or voice with that of someone else, in a way that appears real"). In popular media too, the term has been used to describe authorized uses as well as malicious ones. *See* Nilesh Christopher & Varsha Bansal, *Indian Voters Are Being Bombarded With Millions of Deepfakes. Political Candidates Approve*, WIRED (May 20, 2024), https://www.wired.com/story/indian-elections-ai-deepfakes/ ("Politicians are using audio and video deepfakes of themselves to reach voters—who may have no idea they've been talking to a clone.").

[11] *E.g.*, Press Release, Office of Congresswoman Jennifer Wexton, Wexton Shares Video Debuting New AI Voice Model (July 10, 2024), https://wexton.house.gov/news/documentsingle.aspx?DocumentID=952 ("Today, Congresswoman Jennifer Wexton (D-VA) shared a video debuting a new Artificial Intelligence-generated model of her voice as it was before being impacted by her Progressive Supranuclear Palsy (PSP) condition.").

[12] Universal Music Group ("UMG"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5–6 (Oct. 30, 2023) ("UMG Initial Comments"); *see also* Elias Leight, *Will AI Be Used to Raise Musicians From the Dead*?, BILLBOARD (Nov. 29, 2023), https://www.billboard.com/pro/ai-bring-back-dead-artists-musicians-estate-managers/.

[13] *See, e.g.*, Letter from Motion Picture Association ("MPA"), Summary of *Ex Parte* Meeting on May 13, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 2 (May 20, 2024) ("MPA highlighted the importance of this issue to our members, given the ubiquity of depiction of individuals in docudramas, biopics, and similar works. And we argued that use of digital-replica technology is simply an evolution of the type of technology our members have long used to make actors more closely resemble the people they portray, including make-up and prosthetics.").

[14] *See, e.g.*, American Association of Independent Music ("A2IM") et al., Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 1–2 (Dec. 6, 2023) ("A2IM-Recording Academy-RIAA Joint Reply Comments"); William Morris Endeavor Entertainment, LLC ("WME"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2 (Oct. 30, 2023) ("WME Initial Comments").

Randy Travis, who has limited speech function since suffering a stroke, was able to use generative AI to release his first song in over a decade.[15]

At the same time, a broad range of actual or potential harms arising from unauthorized digital replicas has emerged. Across the creative sector, the surge of voice clones and image generators has stoked fears that performers and other artists will lose work or income.[16] There have already been film projects that use digital replica extras in lieu of background actors,[17] and situations where voice actors have been replaced by AI replicas.[18] Within the music industry, concerns have been raised that the use of AI in sound recordings could lead to the "loss of authenticity and creativity" and displacement of human labor.[19] Numerous commenters,

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[15] Dylan Smith, *Randy Travis Harnesses AI to Release His 'First New Music in More Than a Decade' – Another Song Is Already Being Created*, DIGIT. MUSIC NEWS (May 6, 2024), https://www.digitalmusicnews.com/2024/05/06/randy-travis-new-song.

[16] *See, e.g.*, Screen Actors Guild-American Federation of Television Artists ("SAG-AFTRA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 4 (Oct. 30, 2023) ("SAG-AFTRA Initial Comments"); Writers Guild of America ("WGA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2–3 (Oct. 30, 2023) ("WGA Initial Comments"); Christi Carras, *Which Entertainment Jobs Are Most Likely to Be Disrupted by AI? New Study Has Answers*, L.A. TIMES (Jan. 30, 2024), https://www.latimes.com/entertainment-arts/business/story/2024-01-30/ai-artificial-intelligence-impact-report-entertainment-industry; Sam O'brien, *AiArt: Why Some Artists Are Furious About AI-Produced Art*, IEEE COMPUT. SOC'Y (Nov. 29, 2023), https://www.computer.org/publications/tech-news/trends/artists-mad-at-ai; Ari's Take, *Is AI Music Taking Royalties From Musicians and Composers? — The New Music Business Podcast*, YOUTUBE, at 20:57 (Jan. 17, 2024), https://www.youtube.com/watch?v=3I9dnxzjEzg.

[17] Jeremy Dick, *Disney Gets Roasted for 'Creepy' AI Extras in Disney+ Movie Prom Pact*, CBR (Oct. 12, 2023), https://www.cbr.com/disney-prom-pact-ai-actors/; *see also* Bobby Allyn, *Movie Extras Worry They'll be Replaced by AI. Hollywood Is Already Doing Body Scans*, NPR (Aug. 2, 2023), https://www.npr.org/2023/08/02/1190605685/. As we discuss below, there have been steps taken to address these concerns through private and collective bargaining agreements. *See infra* Section II.A.3.

[18] *See, e.g.*, FTC Initial Comments, Attach. at 37 (statement of Tim Friedlander, Nat'l Ass'n of Voice Actors); Cade Metz, *What Do You Do When A.I. Takes Your Voice?*, N.Y. TIMES (May 16, 2024), https://www.nytimes.com/2024/05/16/technology/ai-voice-clone-lawsuit.html; Ed Nightingale, *Baldur's Gate 3 Actors Reveal the Darker Side of Success Fuelled by AI Voice Cloning*, EUROGAMER (Apr. 12, 2024), https://www.eurogamer.net/baldurs-gate-3-actors-reveal-the-darker-side-of-success-fuelled-by-ai-voice-cloning (addressing concerns by video game voice actors).

[19] *See, e.g.*, CVL ECONOMICS, FUTURE UNSCRIPTED: THE IMPACT OF GENERATIVE AI ON ENTERTAINMENT INDUSTRY JOBS 39–40 (Jan. 2024), https://animationguild.org/wp-content/uploads/2024/01/Future-Unscripted-The-Impact-of-Generative-Artificial-Intelligence-on-Entertainment-Industry-Jobs-pages-1.pdf ("With the capability to recreate melodies and replicate musicians' voices convincingly and quickly, it is becoming easier than ever to generate a music track without any direct human involvement."); Jem Aswad, *Billie Eilish, Nicki Minaj, Stevie Wonder, Dozens More Call on AI Developers to Respect Artists' Rights*, VARIETY (Apr. 2, 2024), https://variety.com/2024/music/news/billie-eilish-nicki-minaj-ai-respect-artists-rights-1235957451/.

among them many SAG-AFTRA members, stressed the importance of performers being able to prevent such displacement as well as the resulting impacts on their careers and livelihoods.[20]

While digital replicas depicting well-known individuals often attract the most attention, anyone can be vulnerable.[21] Beyond the creative sector, the harms from unauthorized digital replicas largely fall into three categories. First, there have been many reports of generative AI systems being used to produce sexually explicit deepfake imagery.[22] In 2023, researchers concluded that explicit images make up 98% of all deepfake videos online, with 99% of the individuals represented being women.[23] Instances of students creating and posting deepfake explicit images of classmates appear to be multiplying.[24]

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[20] *See, e.g.*, Morgan Keaton, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Oct. 30, 2023); Allie Radice, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Oct. 29, 2023); Gregory Schott, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Oct. 23, 2023).

[21] *E.g.*, Arian Garshi, *Deepfakes in 2022: How individual non-celebrities are targeted,* MEDIUM (Oct. 17, 2022), https://ariangarshi.medium.com/deepfakes-in-2022-how-individual-non-celebrities-are-targeted-a7dab59cac3a.

[22] *See, e.g.*, Caroline Haskins, A *Deepfake Nude Generator Reveals a Chilling Look at Its Victims*, WIRED (Mar. 25, 2024), https://www.wired.com/story/deepfake-nude-generator-chilling-look-at-its-victims/; Katherine Noel, *Journalist Emanuel Maiberg Addresses AI and the Rise of Deepfake Pornography*, INST. OF GLOBAL POL. (Apr. 22, 2024), https://igp.sipa.columbia.edu/news/rise-deepfake-pornography. On social media platform X alone, one sexually explicit deepfake image of Taylor Swift was "viewed 47 million times before the account [where the image was posted] was suspended." Kate Conger & John Yoon, *Explicit Deepfake Images of Taylor Swift Elude Safeguards and Swamp Social Media*, N.Y. TIMES (Jan. 26, 2024), https://www.nytimes.com/2024/01/26/arts/music/taylor-swift-ai-fake-images.html; Ashley King, *Megan Thee Stallion the Latest Victim of Deepfake Porn — X/Twitter 'Proactively Removing' Clips*, DIGI. MUSIC NEWS (June 14, 2024), https://www.digitalmusicnews.com/2024/06/14/megan-thee-stallion-deepfake-porn-x-twitter-removing.

[23] HOME SECURITY HEROES, 2023 STATE OF DEEPFAKES at Key Findings 2–3 (2023), https://www.homesecurityheroes.com/state-of-deepfakes/#key-findings. *See also* Katherine Noel, *Journalist Emanuel Maiberg Addresses AI and the Rise of Deepfake Pornography*, INST. OF GLOBAL POL. (Apr. 22, 2024), https://igp.sipa.columbia.edu/news/rise-deepfake-pornography ("It is almost exclusively young women who are nonconsensually being undressed and put into AI-generated porn.") (internal quotation marks omitted).

[24] *E.g.*, Natasha Singer, *Teen Girls Confront an Epidemic of Deepfake Nudes in Schools*, N.Y. TIMES (Apr. 8, 2024), https://www.nytimes.com/2024/04/08/technology/deepfake-ai-nudes-westfield-high-school.html; Caroline Haskins, *Florida Middle Schoolers Arrested for Allegedly Creating Deepfake Nudes of Classmates*, WIRED (Mar. 8, 2024), https://www.wired.com/story/florida-teens-arrested-deepfake-nudes-classmates/; Cameron Sires, *Schools Navigate The New World of Explicit AI-Generated Images*, ISSAQUAH REPORTER (Apr. 16, 2024), https://www.issaquahreporter.com/news/schools-navigate-the-new-world-of-explicit-ai-generated-images/; Miranda Ceja, *AI-Generated Nude Photos Of High Schoolers Investigated In South OC*, MSN NEWS (Apr. 2, 2024), https://www.msn.com/en-us/news/us/ai-generated-nude-photos-of-high-schoolers-investigated-in-south-oc/ar-BB1kXrkt.

Second, the ability to create deepfakes offers a "potent means to perpetrate fraudulent activities with alarming ease and sophistication."[25] The media has reported on scams in which defrauders replicated the images and voices of a multinational financial firm's CEO and its employees to steal $25.6 million;[26] replicated loved ones' voices to demand a ransom;[27] and replicated the voice of an attorney's son asking him to wire $9,000 to post a bond.[28] Digital replicas of celebrities have been used to falsely portray them as endorsing products.[29]

Finally, there is a danger that digital replicas will undermine our political system and news reporting by making misinformation impossible to discern. Recent examples involving politicians include a voice replica of a Chicago mayoral candidate appearing to condone police brutality;[30] a robocall with a replica of President Biden's voice discouraging voters from participating in a primary election;[31] and a campaign ad that used AI-generated images to depict former President Trump appearing with former Director of the National Institute of Allergy and Infectious Diseases, Anthony Fauci.[32] Deepfake videos were even used to influence a high

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[25] Giuseppe Ciccomascolo, *Deepfakes Make Up 66% of AI Fraud While Crypto Scams Halved*, CCN (Apr. 25, 2024), https://www.ccn.com/news/technology/deepfakes-ai-fraud-crypto-scams/.

[26] Heather Chen & Kathleen Magramo, *Finance worker pays out $25 million after video call with deepfake 'chief financial officer'*, CNN (Feb. 4, 2024), https://www.cnn.com/2024/02/04/asia/deepfake-cfo-scam-hong-kong-intl-hnk/index.html ("The elaborate scam saw the [finance] worker duped into attending a video call with what he thought were several other members of staff, but all of whom were in fact deepfake recreations . . . . [T]he worker put aside his early doubts after the video call because other people in attendance had looked and sounded just like colleagues he recognized . . . .").

[27] Charles Bethea, *The Terrifying A.I. Scam That Uses Your Loved One's Voice*, NEW YORKER (Mar. 7, 2024), https://www.newyorker.com/science/annals-of-artificial-intelligence/the-terrifying-ai-scam-that-uses-your-loved-ones-voice.

[28] Samantha Manning, *Father Warns Congress About AI scammer Who Sounded Just Like His Son*, KIRO7 (Nov. 16, 2023), https://www.kiro7.com/news/local/father-warns-congress-about-ai-scammer-who-sounded-just-like-his-son/KA7BXJJ2OJB3NHDDM4EGB5L24M/.

[29] *See, e.g.*, Megan Cerullo, *AI-generated Ads Using Taylor Swift's Likeness Dupe Fans With Fake Le Creuset Giveaway*, CBS NEWS (Jan. 16, 2024), https://www.cbsnews.com/news/taylor-swift-le-creuset-ai-generated-ads/; *Tom Hanks Says AI Version of Him Used In Dental Plan Ad Without His Consent*, THE GUARDIAN (Oct. 1, 2023), https://www.theguardian.com/film/2023/oct/02/tom-hanks-dental-ad-ai-version-fake; Jamey Tucker, *Fake Ads Made With Artificial Intelligence Exploit Celebrities on Social Media*, WPSD LOCAL 6 (Mar. 11, 2024), https://www.wpsdlocal6.com/news/fake-ads-made-with-artificial-intelligence-exploit-celebrities-on-social-media/article_7a94d8a6-dfba-11ee-bb47-7f2861477d8e.html.

[30] Tiffany Hsu & Steven Lee Myers, *A.I.'s Use in Elections Sets Off a Scramble for Guardrails*, N.Y. TIMES (June 25, 2023), https://www.nytimes.com/2023/06/25/technology/ai-elections-disinformation-guardrails.html.

[31] Shannon Bond, *AI Fakes Raise Election Risks As Lawmakers and Tech Companies Scramble to Catch Up*, NPR (Feb. 8, 2024), https://www.npr.org/2024/02/08/1229641751.

[32] Nicholas Nehamas, *DeSantis Campaign Uses Apparently Fake Images to Attack Trump on Twitter*, N.Y. TIMES (June 8, 2023), https://www.nytimes.com/2023/06/08/us/politics/desantis-deepfakes-trump-fauci.html.

profile union vote by falsely showing a union leader urging members to oppose the contract that he had "negotiated and . . . strongly supported."[33]

Summarizing the challenges to the information ecosystem, one digital forensics scholar cautioned, "[i]f we enter a world where any story, any audio recording, any image, any video can be fake . . . then nothing has to be real."[34] As AI technology continues to improve, researchers predict that it will become increasingly difficult to distinguish between digital replicas and authentic content.[35]

B. Background of This Study

In early 2023, the Copyright Office announced an initiative to examine the copyright issues raised by AI. Over the following months, we hosted public listening sessions and engaged in extensive outreach to better understand the issues, including those related to generative AI's ability to produce digital replicas.[36]

The topic of digital replicas does not fall neatly under any one area of existing law. While some characterize it as a form of intellectual property, protection against the use of unauthorized digital replicas raises overlapping issues including privacy, unfair competition, consumer protection, and fraud. It relates to copyright in a number of ways: creators such as artists and performers are particularly affected; copyrighted works are often used to produce digital replicas; and the replicas are often disseminated as part of larger copyrighted works. Moreover, the noncommercial harms that may be caused are similar to violations of moral rights protected in part through the copyright system.[37]

In August 2023, the Office published a Notice of Inquiry on AI and Copyright that sought input on "the treatment of generative AI outputs that imitate the identity or style of human artists," among other topics.[38] The NOI asked what existing laws apply to AI-generated material that features the voice or likeness of a particular person; whether Congress should enact a new federal law that would protect against unauthorized digital replicas; and, if so,

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[33] *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Duncan Crabtree-Ireland, National Executive Director, SAG-AFTRA).

[34] Weekend Edition Sunday, *As Tech Evolves, Deepfakes Will Become Even Harder to Spot*, NPR (July 3, 2022), https://www.npr.org/2022/07/03/1109607618 (Interview with Professor Hany Farid of U.C. Berkeley).

[35] *E.g.*, Weekend Edition Sunday, *As Tech Evolves, Deepfakes Will Become Even Harder to Spot*, NPR (July 3, 2022), https://www.npr.org/2022/07/03/1109607618 (Interview with Professor Hany Farid of U.C. Berkeley).

[36] *See, e.g.*, Music and Sound Recordings Listening Session Tr. at 11:11–12; 16:19–17:4; 73:11–77:20 (May 31, 2023) (statements by Nathaniel Bach, Music Artists Coalition ("MAC"); Kenneth Doroshow, Recording Industry Association of America ("RIAA"); Rohan Paul, Controlla; Garrett Levin, Digital Media Association ("DiMA")).

[37] *See infra* note 41.

[38] NOI at 59945.

what its contours should be. We also inquired whether there are or should be protections against AI systems generating outputs that imitate artistic style.[39] Finally, we sought views on how, for sound recordings, section 114(b) of the Copyright Act relates to state laws protecting against the imitation of an individual's voice.[40]

The Office received approximately one thousand comments responding to this group of questions, over 90% of them from individuals. The majority advocated for the enactment of new federal legislation. The scope, duration, and assignability of the right to be provided, as well as its relationship to existing state laws, were the subject of greater disagreement.

The copying of an individual's identity is not an entirely new topic for the Copyright Office. In 2019, we published a report on the moral rights of attribution and integrity[41] in the United States, in which we recommended that Congress consider adopting a federal right of publicity.[42] The current study has a narrower focus—assessing the need for federal protection specifically with respect to unauthorized digital replicas.

The Office concludes that the time has come to adopt such a law at the federal level. Based on our analysis of the comments received, independent research, and a review of work being done at other agencies, we believe there is an urgent need for a robust nationwide remedy beyond those that already exist. In the sections below, we review the protections available under current laws and the gaps in their capacity to respond to today's threats, explain the reasons for new federal protection, and provide recommendations regarding its contours.

We then address requests for protection against AI outputs that mimic or appropriate an artist's style. While the Office acknowledges the seriousness of this concern, we believe that existing laws may provide sufficient protection at this time.

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[39] *Id.* at 59945, 59948.

[40] *Id.* at 59948.

[41] Moral rights are non-economic rights in copyrighted works that are considered personal to the authors. The two most commonly recognized are the right of attribution (being credited as the author) and the right of integrity (preventing distortions of the work). U.S. COPYRIGHT OFFICE, AUTHORS, ATTRIBUTION, AND INTEGRITY: EXAMINING MORAL RIGHTS IN THE UNITED STATES 6 (2019) ("MORAL RIGHTS REPORT"), https://copyright.gov/policy/moralrights/full-report.pdf. The United States provides these moral rights through a combination of federal and state laws, most of which are described below, including the Lanham Act, certain provisions of the Copyright Act, and state laws relating to privacy and publicity, contracts, fraud and misrepresentation, unfair competition, and defamation. *See id.* at 7.

[42] *Id.* at 110–19.

II. PROTECTION AGAINST UNAUTHORIZED DIGITAL REPLICAS

A. Existing Legal Frameworks

A variety of legal frameworks provide protection against the unauthorized use of aspects of an individual's persona. Some exist at the state level, including statutory and common law rights of privacy and publicity. Others are based on federal law, including the Copyright Act, the Federal Trade Commission Act, the Lanham Act, and the Communications Act.

1. State Common and Statutory Law

The most directly relevant state laws are the long-standing rights of publicity and privacy. In response to the accelerating pace of replicas created by generative AI systems, many states are also considering or have enacted new legislation specifically directed at unauthorized digital replicas.

a) Right of Privacy

The common law right of privacy emerged in the late 19th century and has been described as protecting against unreasonable intrusions into individuals' private lives, safeguarding their autonomy, dignity, and personal integrity.[43] Privacy rights are considered personal to the individual and typically apply only to the living.[44] Most states recognize some form of the right of privacy, either through statutory or common law.[45]

The common law right of privacy has been described as a complex of torts,[46] with the torts of false light and of appropriation of name and likeness most relevant here.[47] False light invasion of privacy protects the reputation of individuals, "with the same overtones of mental

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[43] Samuel Warren and Louis Brandeis first argued for a law to protect the right of privacy in their 1890 article, *The Right to Privacy*, describing "the next step which must be taken for the protection of the person, and for securing to the individual . . . the right 'to be let alone.'" Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193, 195 (1890).

[44] RESTATEMENT (SECOND) OF TORTS § 652I (AM. L. INST. 1977).

[45] 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY §§ 6:1, 6:7 (2d ed. 2024).

[46] William L. Prosser, *Privacy*, 48 CALIF. L. REV. 383, 389 (1960) ("It is not one tort, but a complex of four."). The four-tort complex includes: (1) intrusion upon seclusion or solitude, (2) disclosure of embarrassing private facts, (3) false light, and (4) appropriation of a person's name or likeness for the defendant's advantage. DAN B. DOBBS, PAUL T. HAYDEN & ELLEN M. BUBLICK, THE LAW OF TORTS § 578 (2d ed. 2024).

[47] *See* Nicholas Schmidt, *Privacy Law and Resolving 'Deepfakes' Online*, IAPP (Jan. 30, 2019), https://iapp.org/news/a/privacy-law-and-resolving-deepfakes-online/; *see also* Bobby Chesney & Danielle Citron, *Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security*, 107 CALIF. L. REV. 1753, 1794–95 (2019).

distress as in defamation."[48] Liability arises when someone "gives publicity to a matter concerning another that places [them] before the public in a false light," if the false light is "highly offensive to a reasonable person," and if "the actor had knowledge of or acted in reckless disregard as to the falsity."[49] For example, courts have found liability where a defendant spread false statements that "attribut[ed] a lewd fantasy" to a woman and claimed she agreed to appear nude in an adult magazine,[50] as well as where a defendant used individuals' names and likenesses in promotions for strip clubs without their consent.[51] The majority of jurisdictions have recognized this tort,[52] with a few incorporating it by statute.[53]

False light invasion of privacy may provide some legal protection against unauthorized digital replicas when they are used to depict an individual participating in offensive conduct.[54] It would appear particularly appropriate to address deepfake pornography. However, the objective "highly offensive" standard will limit its applicability to other uses of unauthorized digital replicas, such as depictions that are merely untruthful.[55]

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[48] William L. Prosser, *Privacy*, 48 CALIF. L. REV. 383, 400 (1960). *See also* 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 5:112 (2d ed. 2024) ("The difference between false light invasion of privacy and defamation is still unclear. While the false light tort primarily focuses upon indignity and defamation focuses upon reputation, the distinction is a subtle one."). Although some courts view defamation as duplicative of false light invasion of privacy, *see, e.g.*, *Denver Pub. Co. v. Bueno*, 54 P.3d 893, 894 (Colo. 2002), defamatory statements are not necessary for an individual to be placed in a false light. *See* RESTATEMENT (SECOND) OF TORTS § 652E (AM. L. INST. 1977).

[49] RESTATEMENT (SECOND) OF TORTS § 652E (AM. L. INST. 1977). "The courts uniformly adopt the Restatement of Torts list of elements." 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 5:114 n.1 (2d ed. 2024).

[50] *Wood v. Hustler Mag., Inc.*, 736 F.2d 1084, 1089, 1093 (5th Cir. 1984).

[51] *Longoria v. Kodiak Concepts LLC*, 527 F. Supp. 3d 1085, 1102 (D. Ariz. 2021); *Johnson v. J.P. Parking, Inc.*, No. 4:22-cv-00146, 2024 WL 676770, at *18 (S.D. Iowa Feb. 20, 2024).

[52] *Welling v. Weinfeld*, 866 N.E.2d 1051, 1055 (Ohio 2007) ("A majority of jurisdictions in the United States have recognized false-light invasion of privacy as a distinct, actionable tort."). However, some states, such as Colorado, Florida, Minnesota, New York, North Carolina, and Texas, have rejected or do not recognize the false light tort. 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 5:115 (2d ed. 2024).

[53] *E.g.*, 9 R.I. GEN. LAWS § 9-1-28.1(a)(4) (2024) (providing for a "right to be secure from publicity that reasonably places another in a false light before the public," and allowing recovery if "[t]here has been some publication of a false or fictitious fact which implies an association which does not exist" and "[t]he association which has been published or implied would be objectionable to the ordinary reasonable man under the circumstances"); NEB. REV. STAT. § 20-204 (2024) (following the *Restatement (Second) of Torts*' formulation).

[54] *See* Douglas Harris, *Deepfakes: False Pornography Is Here and the Law Cannot Protect You*, 17 DUKE L. & TECH. REV. 99, 115–16 (2019).

[55] *See, e.g.*, *De Havilland v. FX Networks, LLC*, 230 Cal.Rptr.3d 625, 630, 644 (Cal. Ct. App. 2018) (rejecting a false light claim for a docudrama's fictionalized interview because it would not "subject a person to hatred, contempt, ridicule, or obloquy").

The related tort of invasion of privacy by appropriation involves "appropriation of the plaintiff's identity or reputation, or some substantial aspect of it, for the defendant's own use or benefit."[56] On its face, this tort appears well suited to protect against unauthorized digital replicas,[57] although not every state recognizes it.[58] Courts, however, have not interpreted the tort consistently. Several states require that the appropriative act be for commercial purposes or purposes of trade,[59] excluding claimants harmed by noncommercial uses. Although in most jurisdictions the tort is available to any member of the public, some require a showing that the name or likeness has "intrinsic value," limiting protection to individuals who are well-known.[60]

b) Right of Publicity

The right of publicity addresses the use of individuals' personas[61] in commercial contexts, aiming to prevent others from profiting from unauthorized uses. The right evolved from the tort of invasion of privacy by appropriation to protect celebrities and well-known figures.[62] In 1953, the Second Circuit coined the term "right of publicity" in *Haelan Laboratories, Inc. v. Topps Chewing Gum, Inc.*, where it held that "in addition to and independent of that right

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[56] DAN B. DOBBS, PAUL T. HAYDEN & ELLEN M. BUBLICK, THE LAW OF TORTS § 579 (2d ed. 2024). Common law elements of invasion of privacy include (1) use, without permission, of "some aspect of the plaintiff's identity or persona in such a way that plaintiff is identifiable from defendant's use," and (2) that the use "causes some damage to plaintiff's peace of mind and dignity, with resulting injury measured by plaintiff's mental or physical distress and related damage." 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 5:62 (2d ed. 2024) (footnote omitted).

[57] Shannon Reid, *The Deepfake Dilemma: Reconciling Privacy and First Amendment Protections*, 23 U. PA. J. CONST. L. 209, 215 (2021).

[58] *See, e.g.*, *Hougum v. Valley Mem'l Homes*, 1998 ND 24, ¶ 12, 574 N.W.2d 812, 816 ("This Court has not decided whether a tort action exists in North Dakota for invasion of privacy."); *Nelson v. J.C. Penney Co.*, 75 F.3d 343, 347 (8th Cir. 1996).

[59] *See, e.g.*, *Barbieri v. News-J. Co.*, 56 Del. 67, 70, 189 A.2d 773, 774 (1963); *Fergerstrom v. Hawaiian Ocean View Ests.*, 441 P.2d 141, 144 (1968).

[60] *See* 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 5:62 (2d ed. 2024). Right of privacy laws generally do not address other issues, such as secondary liability or First Amendment exceptions, at the level of detail that right of publicity laws do, as discussed below. We also received fewer comments focused on these issues from a right of privacy perspective.

[61] The term "persona" in right of publicity law "is increasingly used as a label to signify the cluster of commercial values embodied in personal identity as well as to signify that human identity 'identifiable' from defendant's usage. There are many ways in which a 'persona' is identifiable: from name, nickname and voice, to picture or performing style and other indicia which identify the 'persona' of a person." *Id.* § 4:46.

[62] *Id.* § 1:25; Melville B. Nimmer, *The Right of Publicity*, 19 L. & CONTEMP. PROBS. 203, 203–04 (1954) ("[T]he [privacy] doctrine, first developed to protect the sensibilities of nineteenth century Brahmin Boston, is not adequate to meet the demands of the second half of the twentieth century, particularly with respect to the advertising, motion picture, television, and radio industries. Well known personalities connected with these industries do not seek the 'solitude and privacy' which Brandeis and Warren sought to protect.").

of privacy . . . , a man has a right in the publicity value of his photograph, i.e., the right to grant the exclusive privilege of publishing his picture. . . ."[63]

A majority of states now recognize the right of publicity by statute, common law, or both.[64] Because the harms that the right of publicity and the tort of invasion of privacy address are similar, some jurisdictions use the terms interchangeably,[65] while others treat them as distinct.[66]

Intended to protect aspects of an individual's identity, the right of publicity may be the most apt state law remedy for unauthorized digital replicas.[67] Numerous commenters noted, however, that the contours of the right differ considerably from state to state.[68] As to the subject matter, in some states the law sweeps more broadly than digital replicas, capturing aspects of

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[63] 202 F.2d 866, 868 (2d Cir. 1953).

[64] 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 6:2 (2d ed. 2024). Some states, such as Alaska, Kansas, Maryland, and North Carolina, have neither statutory nor common law rights of publicity. *See* Jennifer Rothman, *Rothman's Roadmap to the Right of Publicity*, https://rightofpublicityroadmap.com/law/ (last visited July 21, 2024). There are also a few states, such as Colorado, Delaware, and Oregon, that have no statutory right of publicity but where the existence of a common-law right is unclear. *Id. See generally* 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 1:2 (2d ed. 2024).

[65] *E.g.*, *Rosa & Raymond Parks Inst. for Self Dev. v. Target Corp.*, 812 F.3d 824, 830 (11th Cir. 2016) ("The last category of invasion of privacy—misappropriation of a person's name or likeness—is commonly referred to as a violation of the 'right of publicity.'"); *In re Jackson*, 972 F.3d 25, 34 (2d Cir. 2020) (using the *Restatement (Second) of Torts*' description of liability for invasion of privacy by appropriation to describe right of publicity liability).

[66] *See, e.g.*, *Minnifield v. Ashcraft*, 903 So. 2d 818, 826 (Ala. Civ. App. 2004) ("[W]e cannot say that the commercial-appropriation invasion-of-privacy tort in Alabama bases its liability solely on commercial rather than psychological interests. To do so would, in effect, substitute the commercial-appropriation invasion-of-privacy tort with the tort of violating the right to publicity.").

[67] A number of commenters agreed that existing rights of publicity would apply to certain uses of digital replicas. *See, e.g.*, Jennifer Rothman, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2–3 (Oct. 25, 2023) ("Jennifer Rothman Initial Comments") (noting that, in the context of an AI-generated Tom Hanks appearing in an advertisement and the AI-generated voices of Drake and The Weeknd appearing in a song, "[a]bsent jurisdictional hurdles, . . . each have straightforward lawsuits under state right of publicity laws for the uses described"); SAG-AFTRA Initial Comments at 6–7; *see also* Russell Spivak, *"Deepfakes": The Newest Way to Commit One of the Oldest Crimes*, 3 GEO. L. TECH. REV. 339, 383–85 (2019); Alexandra Curren, *Digital Replicas: Harm Caused by Actors' Digital Twins and Hope Provided by the Right of Publicity*, 102 TEX. L. REV. 155, 164, 166–67 (2023). Indeed, courts have applied standard right of publicity laws to other forms of digital likenesses. *See, e.g.*, *Hart v. Elec. Arts, Inc.*, 717 F.3d 141 (3d Cir. 2013) (digital avatars of football players); *No Doubt v. Activision Publ'g, Inc.*, 122 Cal. Rptr. 3d 397 (Cal. Ct. App. 2011) (digital avatars of the musical group No Doubt).

[68] *See, e.g.*, The Honorable Marsha Blackburn, U.S. Senator, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2–3 (Oct. 30, 2023) ("Senator Marsha Blackburn Initial Comments"); Computer & Communications Industry Association, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 24 (Oct. 30, 2023); Daniel Gervais, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 9 (Oct. 30, 2023).

identity that merely evoke or call to mind the protected individual. In one well-known example, the Ninth Circuit found that a robotic depiction of a blonde woman in a long gown turning large block letters on a game-show set sufficiently "evoked" Vanna White, even without using her name or image, to state a claim under California's common law right of publicity.[69] Further, some states protect additional aspects of identity, such as gestures and mannerisms in Indiana[70] or "any attribute of an individual that serves to identify that individual to an ordinary, reasonable viewer or listener" in Illinois.[71]

In other cases, the laws are written too narrowly to cover all types of digital replica uses. Some states restrict the right to limited groups of individuals, from professional performers,[72] to soldiers[73] or the deceased.[74]

Protection for Postmortem Rights. The treatment of postmortem rights of publicity is one of the areas of greatest variation.[75] Twenty-seven states currently provide postmortem rights of publicity, 19 by statute and 8 by common law.[76] The durations vary from as short as 20 years in Virginia, to 100 years in Indiana, and indefinitely in Tennessee, as long as the right is continuously exploited.[77] The postmortem term can differ depending on the ongoing

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[69] *White v. Samsung Electronics America, Inc.*, 971 F.2d 1395, 1399 (9th Cir. 1992), *as amended* (Aug. 19, 1992) ("The identities of the most popular celebrities are not only the most attractive for advertisers, but also the easiest to evoke without resorting to obvious means such as name, likeness, or voice."). *See also* Stacy L. Dogan, *An Exclusive Right to Evoke*, 44 B.C. L. REV. 291, 292 (2003) (citing cases where "non-proprietary symbols" were held to call to mind, and thus violate the right of publicity of, various celebrities).

[70] IND. CODE § 32-36-1-6 (2024).

[71] 765 ILL. COMP. STAT. 1075/5 (West 2024).

[72] *See infra* Section II.A.1.c.

[73] ARIZ. REV. STAT. ANN. § 12-761 (2024).

[74] TEX. PROP. CODE ANN. § 26.002 (West 2023). As mentioned above, New York's digital-replicas-specific amendment applies only to deceased performers. N.Y. CIV. RIGHTS LAW § 50-f(1)(a)–(b), (2)(b) (McKinney 2024).

[75] *See, e.g.*, CAL. CIV. CODE §§ 3344, 3344.1 (West 2024) (protecting against the unconsented commercial use of a person's name, voice, signature, photograph, or likeness, affording a 70-year postmortem term, and requiring registration by the successor in interest); KY. REV. STAT. ANN. § 391.170 (West 2024) (recognizing a right in name and likeness, and protecting against the commercial use of the name or likeness of a "public figure" for 50 years after death); *see also* Mary LaFrance, *Choice of Law and the Right of Publicity: Rethinking the Domicile Rule*, 37 CARDOZO ARTS & ENT. L.J. 1, 2 (2019).

[76] 2 J. THOMAS MCCARTHY AND ROGER E. SCHECHTER, RIGHTS OF PUBLICITY AND PRIVACY § 9:17 (2d ed.).

[77] *See* VA. CODE ANN. § 8.01-40 (2024); IND. CODE § 32-36-1-8(a) (2024); TENN. CODE ANN. § 47-25-1104 (2024).

commercial exploitation of the individual's identity, its commercial value at the time of death, and whether the estate complied with statutory registration requirements.[78]

Commercial Use Requirement. Many right of publicity laws only protect against unauthorized commercial uses. These uses may include advertising campaigns, product endorsements, merchandising, and sponsored content,[79] and may extend to newer forms of commercial exploitation facilitated by digital platforms, such as influencer marketing and brand partnerships on social media.[80]

Secondary and Intermediary Liability. Most state statutes do not specify rules for potential secondary liability.[81] However, courts have interpreted these laws as incorporating ordinary tort law principles of aiding and abetting liability, so that a party may be secondarily liable for infringing the right where it has knowledge of the illegal acts and provides substantial assistance.[82]

Several states explicitly limit liability for certain types of intermediaries, where they lack knowledge of the unauthorized acts. California, Pennsylvania, Ohio, and New York exempt advertising media from liability so long as they do not have knowledge that the use of the name, image, or likeness is unauthorized.[83] Arkansas, borrowing concepts from federal copyright law,[84] exempts the "service provider of a system or network" if the service provider does not have actual knowledge that the use is unlawful and is not aware of facts and

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[78] *See, e.g.*, CAL. CIV. CODE § 3344.1(h) (West 2024) (applying to deceased personalities "whose name, voice, signature, photograph, or likeness has commercial value at the time of his or her death, or because of his or her death").

[79] *See, e.g.*, *Onassis v. Christian Dior-New York, Inc.*, 472 N.Y.S.2d 254 (1984), *judgment aff'd*, 488 N.Y.S.2d 943 (1985) (finding that the use of a look-alike in an advertisement infringed Jacqueline Onassis's right of publicity); *Beverley v. Choices Women's Med. Ctr., Inc.*, 532 N.Y.S.2d 400 (1991) (holding that the use of a female physician's photo on a calendar distributed by and advertising the defendant's business infringed the physician's right of publicity).

[80] Grace Greene, *Instagram Lookalikes and Celebrity Influencers: Rethinking the Right of Publicity in the Social Media Age*, 168 U. PA. L. REV. ONLINE 153, 189–92 (2020) (citing several (settled) right of publicity suits by online influencers seeking to protect their exact images as well as their influencer personas).

[81] *See* Alexandra Curren, *Digital Replicas: Harm Caused by Actors' Digital Twins and Hope Provided by the Right of Publicity*, 102 TEX. L. REV. 155, 164, 166–67 (2023).

[82] *See, e.g.*, *Perfect 10, Inc. v. Cybernet Ventures, Inc.*, 213 F. Supp. 2d 1146, 1183–84 (C.D. Cal. 2002); *Keller v. Elecs. Arts, Inc.*, No. 09-cv-1967, 2010 WL 530108, at *3 (N.D. Cal. Feb. 8, 2010) (allowing civil conspiracy claims for violation of California right of publicity to proceed based on defendant's alleged direction of users to infringing websites).

[83] *See* CAL. CIV. CODE §§ 3344(f), 3344.1(a)(l) (West 2024); 42 PA. STAT. AND CONS. STAT. § 8316(d) (2024) (described as those "in the business of producing, manufacturing, publishing or disseminating material for commercial or advertising purposes by any communications medium"); OHIO REV. CODE ANN. § 2741.02(E) (West 2024); N.Y. CIV. RIGHTS LAW § 50-f(9) (McKinney 2024) (adding a "by prior notification" element to knowledge).

[84] *See infra* Section II.B.3.d.

circumstances that make a violation apparent.[85] A number of courts have found intermediaries not liable for state right of publicity violations where they served as "mere conduits" for the unlawful activity.[86]

First Amendment Protections. States have adopted varied approaches to accommodating First Amendment concerns, either by statute or judicial interpretation.[87] A number of statutes provide carveouts for categories of conduct likely to implicate protected speech, such as news reporting, sports broadcasts, political campaigns, commentary, and satire.[88] California's law, for example, permits unauthorized uses of an individual's voice or likeness "in connection with any news, public affairs, or sports broadcast or account, or any political campaign."[89] Some carveouts also cover broader categories of expressive works, such as in Ohio, which exempts a "literary work, dramatic work, fictional work, historical work, audiovisual work, or musical work regardless of the media in which the work appears or is transmitted."[90]

Others, however, are silent on this issue.[91] When interpreting the common law, or a statute without an express exemption, courts analyze the extent to which the claim at hand implicates First Amendment rights.[92]

Jurisdiction and Remedies. State right of publicity statutes apply varying jurisdictional requirements. Some restrict the law's protections to those domiciled in the state; others are

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[85] ARK. CODE ANN. § 4-75-1110(a)(1)(F) (2024).

[86] *See Jane Doe No. 1 v. Backpage.com, LLC*, 817 F.3d 12, 27–28 (1st Cir. 2016) (upholding dismissal of statutory misappropriation claims against a classifieds website for images appearing in an advertisement, as it is a "mere[] conduit" and does not benefit from the appropriation); *Almeida v. Amazon.com, Inc.*, 456 F.3d 1316, 1326 (11th Cir. 2006) (highlighting that Amazon did not make "editorial choices" when displaying a book cover that included an unauthorized image on the book's sales page, and that the display was incidental to its role as an internet bookseller).

[87] JENNIFER E. ROTHMAN, THE RIGHT OF PUBLICITY 145, 147 (2018) ("At least five balancing approaches have been applied to evaluate First Amendment defenses in right of publicity cases. . . . This panoply of tests used to determine whether the First Amendment allows and protects uses of a person's identity has led to bizarre and conflicting outcomes in cases with similar facts.").

[88] *See, e.g.*, CAL. CIV. CODE § 3344 (West 2024); ARK. CODE ANN. § 4-75-1110 (2024); N.Y. CIV. RIGHTS LAW § 50-f(2)(d) (McKinney 2024); LA. STAT. ANN. § 51:470.5 (2024); NEV. REV. STAT. § 597.790 (2023).

[89] CAL. CIV. CODE § 3344(d) (West 2024).

[90] OHIO REV. CODE ANN. § 2741.09(A)(1)(a) (West 2024).

[91] *See, e.g.*, KY. REV. STAT. ANN. § 391.170 (West 2024); UTAH CODE ANN. § 45-3-3 (West 2024); VA. CODE ANN. § 8.01-40 (2024).

[92] *See, e.g.*, *Daly v. Viacom*, 238 F. Supp. 2d 1118, 1123 (N.D. Cal. 2002) (the First Amendment protected the use of the plaintiff's likeness in advertisements for a television show in which the plaintiff appeared; the advertisement was found to be an expressive work); *Hoffman v. Capital Cities/ABC, Inc.*, 255 F.3d 1180, 1186–87 (9th Cir. 2001) (right of publicity claims targeting noncommercial uses of an individual's name or likeness may receive heightened First Amendment scrutiny).

more generous.[93] Remedies available to a successful plaintiff also vary across states, although all provide for some form of both injunctive and monetary relief.[94]

c) New State Regulation of Digital Replicas

In response to the emergence of AI-created digital replicas, a number of states have taken steps to either amend existing right of publicity statutes or adopt new laws.[95] Tennessee, for example, recently extended its right of publicity statute to encompass voice simulations.[96] It also expanded the law's scope beyond solely commercial conduct (*i.e.*, "purposes of advertising") to include all acts of unauthorized publishing, performing, distributing, transmitting, or making available to the public.[97]

Two other states, Louisiana and New York, recently passed laws targeting the use of digital replicas.[98] The Louisiana statute applies only to living, professional performers, and prohibits the use of their digital replicas "in a public performance of a scripted audiovisual work, or in a live performance of a dramatic work, if the use is intended to create, and creates, the clear impression that the professional performer is actually performing in the role of a fictional character."[99] New York's amendment of its existing right of publicity prohibits unauthorized digital replicas of deceased professional performers "in a scripted audiovisual

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[93] *Compare* WASH. REV. CODE § 63.60.010 (2024) (applying to "all individuals and personalities, living and deceased, regardless of place of domicile or place of domicile at time of death"), *with* OHIO REV. CODE ANN. § 2741.03 (West 2024) (limiting to individuals whose domicile or residence is or was in the state).

[94] *See, e.g.*, ARK. CODE ANN. § 4-75-1109 (2024) (providing for injunctive relief and recovery of monetary damages and profits); OHIO REV. CODE ANN. § 2741.07 (West 2024) (providing for injunctive relief and recovery of actual damages including profits, statutory damages, punitive damages, attorney's fees, and treble damages).

[95] In 2023, state legislators introduced 191 AI-related bills, 37 of them addressing deepfakes. *2023 State AI Legislation Summary*, BSA|THE SOFTWARE ALLIANCE (2023), https://www.bsa.org/files/policy-filings/09222023statelegai.pdf. Six deepfake bills were passed targeting nonconsensual deepfake porn and use of deepfakes in politics. *Id. See, e.g.*, S.D. CODIFIED LAWS § 22-24A-2 (2024); 2024 Utah Laws Chs. 127 (H.B. 148), 146 (S.B. 66), 142 (H.B. 238); UTAH CODE ANN. § 20A-11-1104 (West 2024). New Mexico updated its elections laws in 2024 to require a disclaimer of any "materially deceptive media" generated by AI in the context of certain campaign advertisements, and claims may be brought by the Attorney General, a district attorney, falsely represented individual, candidate, or any organization that represents the interests of potentially deceived voters. 2024 N.M. Laws Ch. 57 (H.B. 182).

[96] Ensuring Likeness, Voice, and Image Security Act of 2024, Tenn. Pub. Acts ch. 588.

[97] *Id.*

[98] Other states seem likely to follow suit. In California, for example, a pending bill would amend the postmortem right of publicity statute to establish liability for the production, distribution, or making available of a deceased personality's digital replica. Assemb. B. 1836, Reg. Sess. (Cal. 2024).

[99] LA. STAT. ANN. § 51:470.4(C) (2024).

work as a fictional character or for the live performance of a musical work" if the use is likely to deceive the public.[100]

Both laws incorporate categorical exemptions to accommodate free speech concerns. New York specifies a list of uses excluded from protection:

> [I]f the work is of parody, satire, commentary, or criticism; works of political or newsworthy value, or similar works, such as documentaries, docudramas, or historical or biographical works, regardless of the degree of fictionalization; a representation of a deceased performer as himself or herself, regardless of the degree of fictionalization, except in a live performance of a musical work; de minimis or incidental; or an advertisement or commercial announcement for any of the foregoing works.[101]

Louisiana's law similarly exempts several categories of uses: those made in connection with "a news, public affairs, sports transmission or account, or political campaign," in works of "political, public interest, educational, or newsworthy value," and in "a play, book, magazine, newspaper, literary work, musical composition, single and original work of art or photograph, or visual work."[102] The law also exempts "a sound recording, audiovisual work, motion picture, or radio or television program," but not if they include unauthorized digital replicas that substitute for a professional performer who did not actually appear in the work.[103]

2. Federal Law

While no federal statute focuses solely on the use of an individual's image, likeness, or voice, several serve to limit the creation or use of digital replicas in particular circumstances. We outline below the most relevant laws and regulatory schemes: the Copyright Act, the Federal Trade Commission Act, the Lanham Act, and the Communications Act. In those areas where the Copyright Office does not have special expertise, we summarize the descriptions by the expert agency or commenters of the statutes and their application to digital replicas.[104]

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[100] N.Y. CIV. RIGHTS LAW § 50-f(1)(a)–(b), (2)(b) (McKinney 2024).

[101] N.Y. CIV. RIGHTS LAW § 50-f(2)(d)(ii) (McKinney 2024).

[102] LA. STAT. ANN. § 51:470.5(B) (2024).

[103] *Id.*; *id.* § 51:470.2(11) (defining "performance" as "the use of a digital replica to substitute for a performance by a professional performer in a work in which the professional performer did not actually appear"). The statute also provides that it "does not affect rights and privileges recognized under other state or federal laws, including those privileges afforded under the 'fair use' factors in the United States Copyright Act of 1976." *Id.* § 51:470.5(A).

[104] Other agencies are also working on aspects of digital replica issues. For example, the Federal Elections Commission ("FEC") has sought public comments on amending 11 C.F.R. section 110.16 to clarify that candidates

a) Copyright Act

Copyright protects original works of authorship, including the material—photographs or audio or video recordings—from which a digital replica might be constructed.[105] The Copyright Act provides copyright owners with a bundle of exclusive rights, including the rights to reproduce a work and to prepare derivative works.[106]

Digital replicas that are produced by ingesting copies of preexisting copyrighted works, or by altering them—such as superimposing someone's face onto an audiovisual work or simulating their voice singing the lyrics of a musical work—may implicate those exclusive rights.[107] If the depicted individual is an owner of the copyrighted work, he or she could have a copyright claim for infringement of the work as a whole. Copyright does not, however, protect an individual's identity in itself, even when incorporated into a work of authorship.[108] A replica of their image or voice alone would not constitute copyright infringement.

b) Federal Trade Commission Act

The Federal Trade Commission Act prohibits "[u]nfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce."[109] FTC

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and their agents may not use deliberately deceptive AI in campaign ads. *Comments sought on amending regulation to include deliberately deceptive Artificial Intelligence in campaign ads*, FEC (Aug. 16, 2023), https://www.fec.gov/updates/comments-sought-on-amending-regulation-to-include-deliberately-deceptive-artificial-intelligence-in-campaign-ads/.

[105] *See* 17 U.S.C. § 102.

[106] *Id.* § 106. Under the Copyright Act, a "derivative work" is a work "based upon one or more preexisting works" in which the original is "recast, transformed, or adapted." *Id.* § 101. Examples of derivative works in the Act's definition include, but are not limited to, "a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation." *Id.*

[107] The Office will address the legal issues involved in use of copyrighted works in AI systems in a subsequent Part of this Report.

[108] *See Downing v. Abercrombie & Fitch*, 265 F.3d 994, 1004 (9th Cir. 2001) ("A person's name or likeness is not a work of authorship within the meaning of 17 U.S.C. § 102."); *Midler v. Ford Motor Co.*, 849 F.2d 460, 462 (9th Cir. 1988) ("A voice is not copyrightable. The sounds are not 'fixed.' What is put forward as protectible here is more personal than any work of authorship."); *see also* 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 5:41 (2d ed. 2024) ("While a recorded aspect of these features, such as a facial photograph or a video, is subject to protection under federal copyright law, the human identity that they identify is not protected by copyright.").

[109] 15 U.S.C. § 45(a)(1). Many states have unfair competition laws that target similar business practices and prohibit deceptive or misleading conduct in commercial activities. *See, e.g.*, CAL. BUS. & PROF. CODE § 17200 (West 2024) (providing that "unfair competition shall mean and include any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising"); MASS. GEN. LAWS ch. 93A, § 11 (2024) (providing a

rules against deceptive advertising and unfair trade practices encompass the misleading use of individuals' identities.

The FTC submitted comments in response to the Office's NOI. It explained that it is empowered to protect the public against deceptive and unfair uses of AI technologies that harm competition, and "there is no AI exemption from the laws on the books."[110] According to the FTC, the use of a digital replica that mimics an individual's voice and likeness might qualify as an unfair method of competition or an unfair or deceptive practice, particularly if it "deceives consumers, exploits a creator's reputation or diminishes the value of her existing or future works, reveals private information, or otherwise causes substantial injury to consumers."[111]

The FTC is also exploring issues related to digital replicas in its ongoing rulemaking to amend its Rule on Impersonation of Government and Businesses.[112] Concurrent with the promulgation of the Impersonation Rule,[113] it issued a supplemental notice requesting comments on the Rule's expansion to prohibit the impersonation of individuals and to extend liability to parties who provide goods and services with knowledge or reason to know that they will be used in impersonations that are unlawful under the Impersonation Rule.[114] The proposed prohibition is meant to address misrepresentations that the person is, or is affiliated with, the impersonated individual, including those that use "identifying information, or insignia or likeness of an individual."[115] Digital replicas, including voice cloning, would be covered.[116]

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cause of action for those who engage in trade or commerce who suffer loss "as a result of the use or employment by another person who engages in any trade or commerce of an unfair method of competition or an unfair or deceptive act or practice"). Because these laws largely parallel the protections provided by the FTC Act and the Lanham Act, we do not discuss them separately.

[110] FTC Initial Comments at 3–4, 6, 8 ("The FTC is empowered under Section 5 of the FTC Act to protect the public against unfair methods of competition, including when powerful firms unfairly use AI technologies in a manner that tends to harm competitive conditions.").

[111] *Id.* at 4–6.

[112] Trade Regulation Rule on Impersonation of Government and Businesses, 89 Fed. Reg. 15072 (Mar. 1, 2024) ("Impersonation Rule"), https://www.govinfo.gov/content/pkg/FR-2024-03-01/pdf/2024-03793.pdf.

[113] Trade Regulation Rule on Impersonation of Government and Businesses, 89 Fed. Reg. 15017 (Mar. 1, 2024) (to be codified at 16 C.F.R. pt. 461), https://www.govinfo.gov/content/pkg/FR-2024-03-01/pdf/2024-04335.pdf.

[114] Impersonation Rule at 15072. The supplemental notice proposes defining "Individual" in 16 C.F.R. section 461.4 to mean "a person, entity, or party, whether real or fictitious, other than those that constitute a business or government under this Part." This definition may include deceased persons.

[115] *Id.* at 15077.

[116] *Id.* at 15082 n.98 ("[T]he use of voice cloning for purposes of impersonation is covered where its use satisfies the Rule's prohibitions. Audio deepfakes, including voice cloning, are generated, edited, or synthesized by artificial intelligence, or 'AI,' to create fake audio that seems real.").

In a statement accompanying the final rule on government and business impersonation and describing the supplemental notice, FTC Chair Lina Khan, joined by Commissioners Rebecca Kelly Slaughter and Alvaro Bedoya, highlighted the proliferation of AI-enabled fraud, such as voice cloning used to impersonate individuals regardless of whether they are celebrities.[117] This statement noted that the extension of "means and instrumentalities" liability could apply to persons or entities, including AI developers, "who knew or should have known that their AI software tool designed to generate deepfakes of IRS officials would be used by scammers to deceive people about whether they paid their taxes."[118]

c) Lanham Act

The Lanham Act is the federal trademark law and addresses certain acts of unfair competition. It prohibits deceptive and misleading uses of marks and unfair competition, and fraud and deception in commerce, among other things.[119] Several commenters noted that third-party uses of a digital replica without authorization could constitute false endorsement under the Lanham Act.[120] They cited cases where Lanham Act claims were successful based on unauthorized uses of aspects of plaintiffs' identities, such as soundalikes and lookalikes in advertising.[121] In some circumstances a celebrity or performer may be able to demonstrate that

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[117] 89 Fed. Reg. 15017, 15030–31 (to be codified at 16 C.F.R. pt. 461) (statement of Chair Lina M. Khan joined by Comm'r Rebecca Kelly Slaughter and Comm'r Alvaro M. Bedoya).

[118] *Id.* at 15031 (to be codified at 16 C.F.R. pt. 461) (statement of Chair Lina M. Khan joined by Comm'r Rebecca Kelly Slaughter and Comm'r Alvaro M. Bedoya).

[119] 15 U.S.C. § 1127. In March 2024, the U.S. Patent and Trademark Office held a public symposium on intellectual property and AI, which included a panel discussion titled "AI, NIL, and the Lanham Act," which addressed the legal and policy considerations related to name, image, and likeness, and the intersection with generative AI. *See Public Symposium on AI and IP*, U.S. PAT. AND TRADEMARK OFF., https://www.uspto.gov/about-us/events/public-symposium-ai-and-ip (last visited July 21, 2024).

[120] Section 43(a) of the Lanham Act establishes liability for using in commerce "any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which[] is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person," or which "in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of his or her or another person's goods, services, or commercial activities." 15 U.S.C. § 1125(a)(1). For comments related to the Lanham Act, see, *e.g.*, International Trademark Association ("INTA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6 (Oct. 30, 2023) ("INTA Initial Comments"); Jennifer Rothman Initial Comments at 3; American Intellectual Property Law Association, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 15 (Oct. 30, 2023); SAG-AFTRA Initial Comments at 5; Kernochan Center for Law, Media and the Arts, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 16 (Oct. 30, 2023).

[121] *E.g.*, UMG Initial Comments at 93 (citing *Waits v. Frito-Lay, Inc.*, 978 F.2d 1093 (9th Cir. 1992)).

their voice or a particular pose has achieved trademark status as the basis for a successful claim.[122]

Both false endorsement and trademark infringement claims require proof of commercial use and a likelihood of consumer confusion, mistake, or deceit. The Lanham Act specifies that the defendant's use must be "likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person."[123] It may be difficult for many individuals, including artists and performers, to prove that the challenged conduct is likely to confuse consumers regarding the plaintiff's association with, or approval of, the defendant's commercial activities. And as INTA noted, AI-generated "revenge porn" would likely fall beyond its reach.[124]

d) Communications Act

The Federal Communications Commission ("FCC") has taken action to regulate digital replicas and to authorize state Attorneys General to do the same. In 2023, it published a Notice of Inquiry on the use of AI-generated voice clones in robocall scams targeting consumers.[125] Following this inquiry, pursuant to the Telephone Consumer Protection Act, the FCC unanimously adopted a declaratory ruling "mak[ing] voice cloning technology used in common robocall scams targeting consumers illegal,"[126] and giving state Attorneys General authority to enforce the rule. FCC Chair Jessica Rosenworcel explained, "Bad actors are using AI-generated

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[122] *See, e.g.*, INTA Initial Comments at 7 (quoting *ETW Corp. v. Jireh Publ'g, Inc.*, 332 F.3d 915, 922 (6th Cir. 2003), for the "general rule" that "a person's image or likeness cannot function as a trademark," unless "a particular photograph was consistently used on specific goods"); Law Office of Seth Polansky LLC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 37 (Oct. 12, 2023) ("Seth Polansky Initial Comments"); *Presley's Est. v. Russen*, 513 F. Supp. 1339, 1364–65 (D.N.J. 1981) (noting that while the assertion that Elvis's likeness and image serve as a service mark is too broad, that "a picture or illustration of Elvis Presley dressed in one of his characteristic jumpsuits and holding a microphone in a singing pose is likely to be found to function as a service mark," and ultimately finding a likelihood of success on the merits of an infringement claim as to that mark).

[123] 15 U.S.C. § 1125(a).

[124] INTA Initial Comments at 8.

[125] FCC, Notice of Inquiry on Implications of Artificial Intelligence Technologies on Protecting Consumers from Unwanted Robocalls and Robotexts, CG Docket No. 23-362 (Nov. 16, 2023), https://docs.fcc.gov/public/attachments/FCC-23-101A1.pdf.

[126] *FCC Makes AI-Generated Voices in Robocalls Illegal*, FCC (Feb. 8, 2024), https://docs.fcc.gov/public/attachments/DOC-400393A1.pdf; *see* FCC, Declaratory Ruling on Implications of Artificial Intelligence Technologies on Protecting Consumers from Unwanted Robocalls and Robotexts, CG Docket No. 23-362 (Feb. 2, 2024), https://docs.fcc.gov/public/attachments/FCC-24-17A1.pdf.

voices in unsolicited robocalls to extort vulnerable family members, imitate celebrities, and misinform voters. We're putting the fraudsters behind these robocalls on notice."[127]

3. Private Agreements

Beyond these statutory and common law protections, private contracts can be negotiated to govern the use of individuals' names or likenesses. Performer service agreements, for example, often include terms proscribing whether and how the other contracting party can use the performer's identity. These usually cover use of the performer's name, image, voice, or likeness for the purpose of promoting the works in which the performer appeared.[128] They may be structured to allow only limited uses, for instance through time-limited grants and restrictions to a particular performance or context, or they may grant broad control, such as an assignment in perpetuity on an exclusive basis.[129] With the advent of AI, some agreements now include specific terms for the use of digital replicas. Talent agency WME, for example, described deals for the use of its clients' likenesses and personalities in connection with AI experiences and products.[130]

In the entertainment field, collective bargaining agreements that establish baseline employment terms have begun to include provisions on the treatment of AI-generated replicas. In December 2023, SAG-AFTRA ratified a multi-year agreement with the Alliance of Motion Picture and Television Producers ("AMPTP") that incorporates new provisions related to the

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[127] *FCC Makes AI-Generated Voices in Robocalls Illegal*, FCC (Feb. 8, 2024), https://docs.fcc.gov/public/attachments/DOC-400393A1.pdf.

[128] 2 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 10:48 (2d ed. 2024) ("When an actor or performer contracts with a producer to perform in a motion picture or record a phonorecord, the actor or performer commonly signs a contract which includes a 'grant of rights' clause. A 'grant of rights' clause typically assigns copyright in the work to the producer and exclusively licenses the producer to use the actor or performer's identity in advertising and promotion of the work.").

[129] *See* JENNIFER E. ROTHMAN, THE RIGHT OF PUBLICITY 120 (2018); *see also id.* at 122 ("Although many of these voluntary assignments are limited in various ways, to particular time periods, or to the context of telecasts, or to a particular photograph, they are often broader—and can be perpetual and cover all uses of a person's identity in any context."). Contract terms made public through litigation provide some examples of the range and breadth of such agreements. *See, e.g.*, *In re Jackson*, 972 F.3d at 31 (recording agreement granting a label term-limited exclusive rights, and non-exclusive rights thereafter, to use the artist's name and likeness for advertising and marketing covered sound recordings and videos); *Lugosi v. Universal Pictures*, 25 Cal. 3d 813, 816 n.2 (Cal. 1979) (grant of rights clause for a film included, in part, the right to use and publicize "the artist's name and likeness, photographic or otherwise, and to recordations and reproductions of the artist's voice and all instrumental, musical and other sound effects produced by the artist hereunder, in connection with the advertising and exploitation of said photoplay" (emphasis omitted)).

[130] WME Initial Comments at 2 ("WME has already worked with its clients to negotiate AI-specific deals . . . [such as] a deal to lend Snoop Dogg's voice to the AI app Artifact, and deals between Meta and WME's clients to lend their likenesses and personalities to a series of AI-powered chatbots.").

creation and use of digital replicas produced by AI.[131] The ratification was the culmination of a months-long strike, in which this was among the issues "at the forefront."[132] The agreement's final terms establish guidelines related to consent, compensation, and exceptions for replicas created outside the scope of employment if the intended use is protected by the First Amendment.[133] First Amendment-protected uses are specified to include those "for purposes of comment, criticism, scholarship, satire or parody, or . . . use in a docudrama, or historical or biographical work."[134] Similar protections have been negotiated for voice actors and recording artists with respect to voice replicas.[135]

As AI technology continues to evolve, tailored private agreements are likely to become more common.[136] It may be unrealistic, however, to expect such agreements to extend to many other industries, particularly outside of the collective bargaining context.

B. The Need for Federal Legislation

The Copyright Office concludes that new federal legislation is urgently needed. As numerous commenters noted, generative AI technology enables the production and dissemination of digital replicas at a speed and scale that calls for a national response.[137]

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[131] Memorandum of Agreement Between the SAG-AFTRA and the AMPTP 60–76 (2023) ("SAG-AFTRA 2023 Agreement"), https://www.sagaftra.org/files/2023_Theatrical_Television_MOA.pdf.

[132] SAG-AFTRA Initial Comments at 1 ("[M]any of our members have identified AI as their number one issue, more important to them than increases in wages or improvements in other working conditions, because it poses an existential threat to their very livelihoods.").

[133] SAG-AFTRA 2023 Agreement at 60–76.

[134] *Id.* at 67.

[135] In January 2024, SAG-AFTRA entered into an agreement with Replica Studios covering the use of digital voice replicas by video game studios, and in April 2024, its members ratified an agreement with several major record labels regarding the use of voice replicas in sound recordings. Both agreements include provisions regarding consent and compensation. *SAG-AFTRA and Replica Studios Introduce Groundbreaking AI Voice Agreement at CES*, SAG-AFTRA (Jan. 9, 2024), https://www.sagaftra.org/sag-aftra-and-replica-studios-introduce-groundbreaking-ai-voice-agreement-ces; *SAG-AFTRA Members Ratify 2024 Sound Recordings Code Contract*, SAG-AFTRA (Apr. 30, 2024), https://www.sagaftra.org/sag-aftra-members-ratify-2024-sound-recordings-code-contract.

[136] More recently, in June 2024, the International Alliance of Theatrical Stage Employees ("IATSE") and AMPTP reached a tentative agreement covering requests and consent to "scan" employees. *Tentative 2024–2027 Basic Agreement Summary* at 5, IATSE (2024), https://iatse.net/wp-content/uploads/2024/06/2024-SUMMARY-OF-BASIC-AGREEMENT-NEGOTIATIONS_6.28.24-FINAL.pdf.

[137] *See*, *e.g.*, American Society of Composers, Authors and Publishers, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 13 (Oct. 30, 2023) ("[T]he ubiquity and scale of this new technology requires a robust federal law ensuring that creators' rights are adequately protected."); Songwriters of North America ("SONA") et al., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of

The impact is not limited to a select group of individuals, a particular industry, or a geographic location. And as described below, existing laws fail to provide fully adequate protection.

1. Shortcomings of Existing Laws

State laws are both inconsistent and insufficient in various respects. As described above, some states currently do not provide rights of publicity and privacy,[138] while others only protect certain categories of individuals.[139] Multiple states require a showing that the individual's identity has commercial value.[140] Not all states' laws protect an individual's voice; those that do may limit protection to distinct and well-known voices, to voices with commercial value,[141] or to use of actual voices without consent (rather than a digital replica).[142]

State right of publicity laws typically apply only where the infringement occurs in advertising, on merchandise, or for other commercial purposes.[143] They do not address the harms that can be inflicted by non-commercial uses, including deepfake pornography, which are particularly prevalent in the internet environment.[144] Different jurisdictional requirements create discrepancies as to who may seek relief.[145] Finally, some of these laws incorporate broad exceptions that may go beyond First Amendment requirements and place many unauthorized uses outside their scope.[146] As numerous commenters noted, the result is a patchwork of protections, with the availability of a remedy dependent on where the affected individual lives or where the unauthorized use occurred.

Inquiry at 10–11 (Oct. 30, 2023) ("SONA-MAC-BMAC Joint Initial Comments") ("We feel strongly that new federal legislation is needed for the protection of a person's identification – their image, voice, characterization, and other likenesses."); WME Initial Comments at 5–6; *Artificial Intelligence and Intellectual Property: Part II—Identity in the Age of AI: Hearing Before the Subcomm. on Cts., Intell. Prop., & the Internet of the H. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Jennifer Rothman, Professor of Law, University of Pennsylvania, in response to Questions for the Record ("QFRs") from Rep. Darrell Issa) ("Recent advancements in AI . . . highlight some preexisting challenges because the scale of the problem of unauthorized uses of a person's identity has grown.").

[138] 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY § 6:2 (2d ed. 2024).

[139] *See supra* notes 72–74 and accompanying text.

[140] *See, e.g.*, 42 PA. STAT. AND CONS. STAT. ANN. § 8316 (2024); OHIO REV. CODE ANN. §§ 2741.01, 2741.02 (West 2024).

[141] *See, e.g.*, 42 PA. STAT. AND CONS. STAT. ANN. § 8316 (2024); OHIO REV. CODE ANN. §§ 2741.01(A), 2741.02 (West 2024).

[142] *See, e.g., Midler*, 849 F.2d at 463 (concluding that the California right of publicity statute does not encompass voice imitations but holding that, under California common law, "when a distinctive voice of a professional singer is widely known and is deliberately imitated in order to sell a product, the sellers have appropriated what is not theirs and have committed a tort in California.").

[143] *See, e.g.*, 765 ILL. COMP. STAT. ANN. 1075/30 (2024); VA. CODE ANN. § 8.01-40 (2024); FLA. STAT. § 540.08 (2024).

[144] *See supra* Section II.A.1.b.

[145] *See id.*

[146] *See, e.g.*, OHIO REV. CODE ANN. § 2741.09(A)(1)(a) (West 2024); *see also infra* Section II.B.3.f.

Existing federal laws are too narrowly drawn to fully address the harm from today's sophisticated digital replicas. As explained above, the Copyright Act protects original works of authorship but does not prevent the unauthorized duplication of an individual's image or voice alone,[147] and the targeted individual may not be an owner of copyright in the work as a whole.[148]

The Federal Trade Commission Act prohibits unfair or deceptive acts or practices in or affecting commerce.[149] While it can be applied to cases where digital replicas are used in commercially misleading ways, it does not provide comprehensive protection in other circumstances. Similarly, under the Lanham Act, claims such as false endorsement involving a digital replica are limited to unauthorized *commercial* uses, and most federal courts also require a showing of consumer awareness of the depicted individual in order to establish a likelihood of confusion, limiting the Lanham Act's protection to well-known figures and commercial circumstances. It may be difficult for many individuals, including less famous artists and performers, to prove that the challenged conduct is likely to confuse consumers regarding the plaintiff's association with, or approval of, the defendant's commercial activities. And issues like AI-generated "revenge porn" would likely fall beyond its reach.[150]

Nor can federal communications law address all of the issues raised by unauthorized digital replicas. It only provides the FCC with enforcement powers related to its authority over common carrier services, transmissions, and cable services.[151] The agency's efforts to combat robocall scams stem from its authority related to telephony issues and can help with that particular context. It does not offer a comprehensive solution that could extend more broadly to situations where the use and dissemination of digital replicas may be common, but are not under the FCC's enforcement purview, such as websites featuring user-generated content.

2. Congressional Activity

The Office's recommendations here are presented against the backdrop of ongoing congressional activity.[152] Members of Congress have warned that AI-generated digital replicas have the potential to exacerbate problems of copyright infringement, as well as labor

[147] *See* 17 U.S.C. § 102; *see also supra* Section II.A.2.a.

[148] *See* 17 U.S.C. § 102(a); *id.* § 201(a).

[149] *See* 15 U.S.C. § 45(a)(1).

[150] INTA Initial Comments at 8.

[151] *Comcast Corp. v. FCC*, 600 F.3d 642, 645 (D.C. Cir. 2010).

[152] This discussion reflects relevant Congressional activity that has occurred before July 22, 2024.

displacement and election misinformation.[153] At a hearing last year on AI and copyright, Senator Chris Coons inquired "whether changes to our copyright laws or whole new protections like a federal right of publicity may be necessary to strike the right balance between creators' rights and AI's ability to enhance innovation and creativity."[154]

Legislation has been introduced to address unauthorized digital replicas in various contexts, including political advertisements and communications[155] and sexually explicit images.[156] These bills include the Preventing Deepfakes of Intimate Images Act,[157] which would make it a crime to intentionally disclose or threaten to disclose AI-generated intimate digital depictions; the REAL Political Advertisements Act,[158] which would require political advertisements to disclaim the use of AI-generated sounds or images; and the Protect Elections from Deceptive AI Act,[159] which would make it a crime to distribute deceptive AI-generated media relating to federal elections.

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[153] The Office is aware that name, image, and likeness issues related to college athletes have also received recent congressional attention. These issues differ from those examined in various aspects here and are beyond the scope of this Report. They arise out of the 2021 Supreme Court decision, *National Collegiate Athletic Association v. Alston*, 141 S. Ct. 2141 (2021), which held in part that NCAA limits on college athlete compensation violated antitrust laws. While the *Alston* case was pending, many states enacted laws to recognize and regulate publicity rights for college athletes. *See generally* Maureen A. Weston, *Off the Guardrails: Opportunities and Caveats for Name Image Likeness and the [Student] Athlete Influencer*, 11 TEXAS A&M L. REV. 911 (2024), https://ssrn.com/abstract=4734794.

[154] *Artificial Intelligence and Intellectual Property—Part II: Copyright: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2023) (statement of Sen. Chris Coons, Chair, S. Subcomm. on Intell. Prop.). The House Judiciary Subcommittee on Courts, Intellectual Property, and the Internet and the Senate Judiciary Subcommittee on Intellectual Property both held hearings focused on the misuse of AI technology with respect to the likeness, voice, and other identifying characteristics of individuals. *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary,* 118th Cong. (2024); *Artificial Intelligence and Intellectual Property: Part II—Identity in the Age of AI: Hearing Before the Subcomm. on Cts., Intell. Prop., & the Internet of the H. Comm. on the Judiciary*, 118th Cong. (2024); *Oversight of AI: Election Deepfakes: Hearing Before the Subcomm. on Priv., Tech., & the Law of the S. Comm. on the Judiciary*, 118th Cong. (2024); *see also At Senate Judiciary Subcommittee Hearing, Klobuchar Urges Action to Address Deepfakes in Elections*, AMY KLOBUCHAR, SENATOR (Apr. 16, 2024), https://www.klobuchar.senate.gov/public/index.cfm/2024/4/at-senate-judiciary-subcommittee-hearing-klobuchar-urges-action-to-address-deepfakes-in-elections.

[155] REAL Political Advertisements Act, H.R. 3044, 118th Cong. (2023); Candidate Voice Fraud Prohibition Act, H.R. 4611, 118th Cong. (2023); REAL Political Advertisements Act, S. 1596, 118th Cong. (2023); Protect Elections from Deceptive AI Act, S. 2770, 118th Cong. (2023).

[156] Preventing Deepfakes of Intimate Images Act, H.R. 3106, 118th Cong. (2023); Protect Victims of Digital Exploitation and Manipulation Act of 2024, H.R. 7567, 118th Cong. (2024); DEFIANCE Act of 2024, S.3696, 118th Cong. (2024); TAKE IT DOWN Act of 2024, S.4569, 118th Cong. (2024).

[157] Preventing Deepfakes of Intimate Images Act, H.R. 3106, 118th Cong. (2023).

[158] REAL Political Advertisements Act, S. 1596, 118th Cong. (2023); REAL Political Advertisements Act, H.R. 3044, 118th Cong. (2023)

[159] Protect Elections from Deceptive AI Act, S. 2770, 118th Cong. (2023).

To date, two congressional proposals would address the unauthorized use of digital replicas more broadly: the No Artificial Intelligence Fake Replicas And Unauthorized Duplications ("No AI FRAUD") Act,[160] and the discussion draft of the Nurture Originals, Foster Art, and Keep Entertainment Safe ("NO FAKES") Act of 2023.[161] A number of commenters specifically referenced these two proposals and were generally supportive.[162]

a) No AI FRAUD Act

Introduced in early 2024, the No AI FRAUD Act would establish intellectual property rights in voice and likeness[163] and protect against the use of unauthorized digital voice replicas and digital depictions that readily identify an individual.[164] The bill would allow these rights to be transferred during the individual's lifetime and would make them descendible.[165] Rights would endure at least ten years after the death of the individual, even if they had not been used commercially during their lifetime, and would continue until either (a) proof that they had not been used commercially in a two-year period by an executor, transferee, heir, or devisee; or (b) the death of all executors, transferees, heirs, or devisees.[166]

The legislation would require any authorization to use a digital depiction or digital voice replica to be in writing and valid only if the individual is represented by counsel. If the individual is a minor, the agreement must be approved by a court in accordance with state

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[160] No AI FRAUD Act, H.R. 6943, 118th Cong. (2024).

[161] Sen. Chris Coons et al., NO FAKES Act Discussion Draft (2023), https://www.coons.senate.gov/imo/media/doc/no_fakes_act_draft_text.pdf. The COPIED Act, introduced in July 2024, establishes rules regarding the attachment of content provenance information for synthetic content, such as digital replicas, but does not provide new rights to individuals. *See* The COPIED Act, S. 4674, 118th Cong. (2024).

[162] *See, e.g.*, SAG-AFTRA Initial Comments at 7–8; Sandra Aistars, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 20 (Oct. 30, 2023); Independent Music Publishers International Forum, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2–3 (Oct. 30, 2023); Dina LaPolt, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 9–10 (Oct. 30, 2023) ("Dina LaPolt Initial Comments").

[163] No AI FRAUD Act, H.R. 6943, 118th Cong. § 3(b)(1)–(2) (2024).

[164] A "digital depiction" is a "replica, imitation, or approximation" of an individual's "likeness," which is defined as an actual or simulated image or likeness that is "readily identifiable as the individual." *Id.* § 3(a)(2), (6) (2024). The bill defines "voice" as an actual or simulated voice that is "readily identifiable" as the depicted individual, while a "digital voice replica" is an audio rendering that includes "replications, imitations, or approximations of an individual that the individual did not actually perform." *Id.* § 3(a)(4)–(5).

[165] *Id.* § 3(b)(2)–(3).

[166] *Id.* § 3(b)(2)–(3).

law.[167] Authorization would also be valid if governed by the terms of a collective bargaining agreement.[168]

The bill would impose direct liability for disseminating a digital voice replica or digital depiction with knowledge that it is not authorized,[169] and for trafficking in a "personalized cloning service" designed to produce digital voice replicas or digital depictions of particular individuals.[170] It would establish secondary liability for any person or entity who "materially contributes to, directs, or otherwise facilitates" directly infringing activity with knowledge that the rightsholder has not consented.[171]

To accommodate the First Amendment, the bill provides a list of factors for a court to consider in balancing the public interest against the private digital replica right.[172] This balancing framework is not required, however, if the digital depiction "includes child sexual abuse material, is sexually explicit, or includes intimate images."[173]

Potential remedies include statutory or actual damages, whichever is greater, lost profits, punitive damages, and attorney's fees.[174] The bill categorizes the law as intellectual property for the purposes of Section 230 of the Communications Decency Act.[175] It expressly does not preempt any state or federal laws.[176]

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[167] *Id.* § 3(b)(4)(A).

[168] *Id.* § 3(b)(4)(B).

[169] Specifically, any person or entity who "publishes, performs, distributes, transmits, or otherwise makes [it] available to the public." *Id.* § 3(c)(1)(B).

[170] *Id.* § 3(a)(3), (c)(1)(A). The bill does not incorporate a knowledge requirement for this violation.

[171] *Id.* § 3(c)(1)(C). The bill does not provide safe harbors, and a disclaimer is not a defense for any infringing activity. *Id.* § 3(c)(2)(D).

[172] *Id.* § 3(d). These factors include whether "(1) the use is commercial; (2) the individual whose voice or likeness is at issue is necessary for and relevant to the primary expressive purpose of the work in which the use appears; and (3) the use competes with or otherwise adversely affects the value of the work of the owner or licensee of the voice or likeness rights at issue." *Id.*

[173] *Id.* § 3(e)(3).

[174] *Id.* § 3(c)(2)(A)–(C).

[175] *Id.* § 3(j); *see infra* Section II.B.3.d.iii.

[176] No AI FRAUD Act, H.R. 6943, 118th Cong. § 3(g) (2024).

b) NO FAKES Act Discussion Draft

The NO FAKES Act discussion draft provides for a right "to authorize the use of the image, voice, or visual likeness of the individual in a digital replica."[177] The right is a descendible and licensable property right that continues for 70 years after the individual's death, even if it is not exploited during their lifetime.[178] Licensing of the right is valid only if the individual is represented by counsel; the agreement is in writing; or the license is governed by a collective bargaining agreement.[179]

The draft bill imposes liability for producing and disseminating a digital replica without consent.[180] It conditions liability on "knowledge that the digital replica was not authorized by the applicable individual or rights holder."[181] The draft includes a list of categorical exclusions from liability, including the use of digital replicas in news, public affairs, or sports broadcasts; in documentary, historical, or biographical works; for comment, criticism, scholarship, satire, or parody; and where the use is *de minimis* or incidental.[182]

Potential remedies include statutory or actual damages, whichever is greater; punitive damages; and attorney's fees.[183] The bill categorizes the law as an intellectual property law for the purposes of Section 230 of the Communications Decency Act.[184] It expressly does not preempt other state or federal laws.[185]

3. The Contours of a New Right

In response to our NOI, the Office received extensive input on the contours of a new digital replica right. After reviewing the comments, existing law, and the current legislative proposals, we have identified the following critical elements: (1) the definition of "digital

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[177] Sen. Coons et al., NO FAKES Act Discussion Draft § 2(b)(1) (2023), https://www.coons.senate.gov/imo/media/doc/no_fakes_act_draft_text.pdf. The draft bill defines a "digital replica" as a representation that "is [nearly indistinguishable]" from an individual's actual image, voice, or visual likeness, and is fixed in a sound recording or audiovisual work. *Id.* § 2(a)(1).

[178] *Id.* § 2(b)(2)(A).

[179] *Id.* § 2(b)(2)(B).

[180] *Id.* § 2(c)(2).

[181] *Id.* § 2(c)(2)(B). The draft bill does not provide safe harbors for any activity. Displaying a disclaimer or not having participated in the "creation, development, distribution, or dissemination" of the digital replica is not a defense. *Id.* § 2(d)(3).

[182] *Id.* § 2(c)(3).

[183] *Id.* § 2(d)(4).

[184] *Id.* § 2(f); *see infra* Section II.B.3.d.iii.

[185] Sen. Chris Coons et al., NO FAKES Act Discussion Draft § 2(e) (2023), https://www.coons.senate.gov/imo/media/doc/no_fakes_act_draft_text.pdf.

replica;" (2) the persons protected; (3) the term of protection; (4) prohibited acts; (5) secondary liability; (6) licenses and assignments; (7) accommodation of First Amendment concerns; (8) remedies; and (9) interaction with state laws.[186]

a) Subject Matter

In this Report, we have defined "digital replica" as "a video, image, or audio recording that has been digitally created or manipulated to realistically but falsely depict an individual."[187] A new bill will have to include text that precisely prescribes the subject matter it seeks to protect. Although the Office did not receive comments proposing definitions, in our view the new right should not sweep too broadly. As discussed above, state rights of publicity have been interpreted to cover a broad range of imitations or evocations, including catch phrases or caricatures.[188] But the conduct that now demands federal attention—such as voice cloning in music and the creation of a video or image that appears to depict a real person—involves replicas that do not merely evoke an individual but are difficult to distinguish from reality. We recommend that federal law target replicas that convincingly appear to be the actual individual being replicated.

b) Persons Protected

As discussed above, state rights of publicity and related laws vary significantly in the persons that are protected. Some protect only those who can demonstrate that they are famous or that their identities have commercial value.[189]

Multiple commenters advocated for a federal right that extends protection to all individuals regardless of their level of fame or the commercial value of their identities.[190] They

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[186] There are other issues on which the NOI did not seek comment and which this Report does not discuss in detail. These include the statute of limitations, retroactivity, and whether federal courts should have exclusive jurisdiction.

[187] *See supra* Section I.A.

[188] *See supra* Section II.A.1.

[189] *See, e.g.*, IND. CODE ANN. § 32-36-1-6 (2024) (defining subject of right of publicity protections as a natural person who possesses an attribute (such as name, voice, image, or likeness) that has commercial value); OHIO REV. CODE §§ 2741.01(A), 2741.02 (2024) (protecting "an individual's name, voice, signature, photograph, image, likeness, or distinctive appearance, if any of these aspects have commercial value").

[190] *See, e.g.*, David Newhoff, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5 (Oct. 7, 2023) ("David Newhoff Initial Comments") ("If ROP law is expanded, it should . . . apply to all persons, not just celebrities . . . ."); Walker Wambsganss et al., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5 (Oct. 26, 2023) ("Walker Wambsganss et al. Initial Comments") ("[M]inimum standards should be set again including but not limited to, . . . obtain[ing] consent of an individual's likeness of AI-generated content regardless of their public or private status . . . ."); Internet Archive, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11–12 (Oct. 30, 2023) ("Internet

pointed out that everyone has a legitimate interest in controlling the use of their likenesses, and harms such as blackmail, bullying, defamation, and use in pornography are not suffered only by celebrities.[191] While a famous performer might be more susceptible to an AI-generated sound recording topping the music charts, any member of the public could be on the receiving end of a robocall imitating a close family member, or the subject of an explicit image used to humiliate them.[192] Protecting all individuals is consistent with the common law right of privacy, which typically requires neither fame nor commercial value.[193]

The Office believes that the goal of enacting a federal digital replica law is to ensure that everyone has adequate protection and recommends that the law cover all individuals.

c) Term of Protection

The appropriate term of protection is the subject of some debate. Should protection continue after death, allowing heirs or assigns to control exploitation of the deceased's voice and image? As discussed above, a number of states provide postmortem protection for rights of publicity, with protections varying in duration and conditions such as continuing commercial exploitation.

The Office received several comments on this issue. Talent agency WME argued in favor of postmortem rights, stating that "[u]nauthorized deepfakes threaten to usurp estates' valid interests in preserving and strengthening artists' legacies through the *legitimate* use of AI" and may detract from the authenticity, credibility, and commercial value of an artist's body of work.[194] Some courts and commentators have reasoned that postmortem rights promote

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Archive Initial Comments") ("The public deserves the right to exist in online spaces without being constantly surveilled, and the right to not have our likeness used in ways that humiliate, harass, or abuse us."); INTA Initial Comments at 10–11 (Basic standards for a federal right of publicity should include that "[a]n individual claimant need not make commercial use of his or her persona to have a right of publicity.").

[191] *See, e.g.*, Jennifer Rothman Initial Comments at 5 ("Many ordinary people have their names, likenesses, and voices used without their permission in ways that cause significant harm, including reputational and commercial injuries. There should be no requirement to have a commercially valuable identity to bring a claim."); Internet Archive Initial Comments at 12 ("It would be unfair to hand out rights to celebrities that would allow them to control how their image is collected, processed and used, but not have any protections for the general public.").

[192] *See supra* Section I.A.

[193] *See supra* Section II.A.1.a.

[194] WME Initial Comments at 4. A number of other groups and individuals also supported postmortem protection. *See, e.g.*, INTA Initial Comments at 11; Letter from RIAA, Summary of *Ex Parte* Meeting on April 23, 2024 Regarding the Office's AI Study, to U.S. Copyright Office (Apr. 29, 2024); *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of FKA twigs, Singer, Songwriter, Producer, Dancer, and Actor, in response to QFRs from Sen. Thom Tillis) ("[T]he NO FAKES Act[] should also provide for protection of the artist's rights and image after their death in perpetuity.").

investment in the deceased's legacy,[195] protect the value of assignments made before death,[196] prevent exploitation that heirs and assigns find objectionable or offensive,[197] and conform to the treatment of other types of property.[198]

Support for a postmortem right, however, was not unanimous. Others asserted that there is a less compelling government interest in such protection, making its application to expressive content more vulnerable to First Amendment challenge.[199] It has also been argued that postmortem rights offer little value as a motivating force for creative endeavors.[200] Moreover, to the extent that rights in one's image, voice, and likeness are personal in nature and rooted in privacy, the interests protected do not survive death and generally are not descendible

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[195] *See Martin Luther King Jr., Ctr. for Soc. Change v. Am. Heritage Prods.*, 694 F.2d 674, 682 (11th Cir. 1983) ("If the right of publicity dies with the celebrity, the economic value of the right of publicity during life would be diminished because the celebrity's untimely death would seriously impair, if not destroy, the value of the right of continued commercial use."); *State ex rel. Elvis Presley Int'l Mem'l Found. v. Crowell*, 733 S.W.2d 89, 99 n.11 (Tenn. Ct. App. 1987) (holding that the law should recognize a celebrity's expectation that he or she is creating a valuable capital asset for the benefit of heirs after death). *Cf.* Peter Felcher & Edward Rubin, *The Descendibility of the Right of Publicity: Is There Commercial Life After Death?*, 89 Yale L.J. 1125, 1128–29 (1980).

[196] *See Martin Luther King Jr., Ctr. for Soc. Change*, 694 F.2d at 705.

[197] Marc A. Lieberstein, *Why a Reasonable Right of Publicity Should Survive Death: A Rebuttal* at 9, 10, NYSBA BRIGHT IDEAS (2008) ("Without a post-mortem right of publicity, [Marilyn] Monroe's name or likeness could show up on portable toilets. Such offensive, unauthorized uses of Monroe's persona are a real possibility absent reasonable legislation that would permit the heirs and/or other authorized entities to regulate use of the publicity right after death.").

[198] *See, e.g.*, *State ex rel. Elvis Presley Int'l Mem'l Found.*, 733 S.W.2d at 97–98 ("If a celebrity's right of publicity is treated as an intangible property right in life, it is no less a property right at death.").

[199] *E.g.*, Letter from MPA, Summary of *Ex Parte* Meeting on May 13, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 5 (May 20, 2024).

[200] As the Sixth Circuit put it in *Memphis Development Foundation v. Factors Etc., Inc.*, before Tennessee adopted postmortem rights legislation, "[t]he desire to exploit fame for the commercial advantage of one's heirs is . . . a weak principle of motivation." 616. F.2d 956, 959 (6th Cir. 1980).

to one's heirs.[201] One commenter warned that postmortem rights could reduce investment in living artists by shifting it to "digitally-resurrected" celebrities.[202]

In addition to these policy arguments, postmortem rights can pose practical challenges. For example, identifying the individual or entity that controls these rights may be difficult, depending on how the rights were bequeathed. INTA suggested addressing the uncertainty around the holder of postmortem rights though a non-mandatory registration system that would provide "public notice that such rights are being claimed, and provide contact information for the use of such rights."[203]

Taking into account all of these points, the Office makes the following recommendation: A federal digital replica right should prioritize the protection of the livelihoods of working artists, the dignity of living persons, and the security of the public from fraud and misinformation regarding current events. For these purposes, a postmortem term is not necessary.

At the same time, we recognize that there is a reasonable argument for allowing heirs to control the use of and benefit from a deceased individual's persona that had commercial value at the time of death. If postmortem rights are provided in a new federal law, we would recommend an initial term shorter than twenty years, perhaps with the option of extending it if

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[201] This point is consistent with the approach taken in the Visual Artists Rights Act, which protects the moral rights of artists to control their work and reputation via copyright law only during the life of the author. 17 U.S.C. § 106A(d)(1). *See Lugosi v. Universal Pictures*, 603 P.2d 425, 431 (Cal. 1979) ("We hold that the right to exploit name and likeness is personal to the artist and must be exercised, if at all, by him during his lifetime."); *see also The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Benjamin Sheffner, Senior Vice President & Associate General Counsel, MPA) ("Any interest in a performer's reputation or dignity is already governed by defamation and privacy law, which is personal to the individual at issue. But recognizing dignitary interests of deceased individuals, and giving heirs or corporate successors the ability to sue over them, would represent a radical change in centuries of American law, under which 'there can be no defamation of the dead.'" (quoting RESTATEMENT (SECOND) OF TORTS § 560 (AM. L. INST. 1977))).

[202] Jennifer Rothman Initial Comments at 6 ("A federal postmortem right may shore up the replacement of up-and-coming performers with long-dead celebrities."). *Cf.* Mark Bartholomew, *A Right to Be Left Dead*, CALIF. L. REV. (forthcoming 2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4610679 ("Because dead celebrities no longer have the capacity to make unpredictable choices in their personal lives that can jeopardize their corporate sponsor's relationship with the public, they represent a more stable investment than their living counterparts. . . . Dead stars also come cheaper as company spokespersons than live ones—an obvious point in their favor when constructing a marketing campaign on a limited budget.").

[203] INTA Initial Comments at 10–11 ("Where practicable, a non-mandatory post-mortem registration system would assist . . . in proving public notice that such rights are being claimed, and provide contact information for the use of such rights. . . . There could be incentives to register the claim of rights, such as reserving the ability to obtain monetary relief to only those valid rights holders who registered their claim prior to the commencement of the unauthorized use.").

the persona continues to be commercially exploited.[204] This approach would not pose the same burden to free expression interests or raise as many practical challenges as a long-term or perpetual right.[205] We note that to the extent the federal law is not fully preemptive, as discussed below, states could still offer a longer term.

d) Infringing Acts

The Office received relatively few comments addressing the scope of the conduct to be prohibited and the allocation of liability.

Regarding the baseline acts that a law should cover, we recommend proscribing activities that involve dissemination to the public—in copyright terms, the acts of distribution, publication, public performance, display, or making available. In our view, this is the type of conduct likely to cause harm to the individual whose image or voice is being replicated.

In contrast, the creation of a digital replica in itself could be part of an artist's experimental process or for a consumer's personal entertainment. Such purely personal use would ordinarily be innocuous and can foster further creativity.[206] If Congress were to impose liability for the mere act of creation, it would be advisable to include a defense for legitimate and reasonable private uses. This does not mean, however, that the act of creation could not be the basis for liability where it is a knowing part of a broader distribution scheme[207] or violates other laws.[208]

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[204] *Cf.* 15 U.S.C. §§ 1058–59 (providing for successive renewals of trademark registrations so long as there is continued use in commerce). The longer term of copyright protection, in contrast, is intended to incentivize the creation of original works in order to promote progress.

[205] Even a short postmortem term could benefit from something like the voluntary registry INTA proposes in order to clarify the status of postmortem rights and facilitate licensing. Among states with right of publicity laws, California, Oklahoma, and Texas all have registration regimes through which descendants of rightsholders may publicly register their rights with the government. CAL. CIV. CODE § 3344.1 (West 2024) (registration is required in order to recover damages); OKLA. STAT. ANN. tit. 12, § 1448(F)(2) (2024) (same); TEX. PROP. CODE ANN. § 26.006 (West 2023) (registration is prima facie evidence of a valid claim to a property right).

[206] In the copyright context, see, *e.g.*, *Chapman v. Maraj*, No. 2:18-cv-9088, 2020 WL 6260021, at *10 (C.D. Cal. Sep. 16, 2020) (holding that Nicki Minaj's unauthorized creation of a derivative work based on a Tracy Chapman song for experimentation was a fair use).

[207] In these circumstances, principles of secondary liability could apply. *See infra* Section II.B.3.d.iii.

[208] For example, digital replicas used to create child sexual abuse material ("CSAM") or nonconsensual pornography would still be subject to criminal law penalties. *See, e.g.*, 18 U.S.C. § 2251(a) (criminalizing, among other acts, using a minor to produce CSAM with materials transported interstate, such as a computer); *United States v. Tatum*, No. 3:22-cr-157, 2023 WL 3185795, at *2 (W.D.N.C. May 1, 2023) (involving an indictment alleging, in part, production of sexually explicit content under 18 U.S.C. § 2251(a) for using a website to produce deepfake nude images); TEX. PENAL CODE ANN. § 21.165(b) (West 2023) ("A person commits an offense if, without the effective consent of the person appearing to be depicted, the person knowingly produces or distributes by electronic means a deep fake video that appears to depict the person with the person's intimate parts exposed or engaged in sexual conduct.").

(i) Commercial Nature of Use

As discussed above, state rights of publicity typically cover only commercial uses.[209] While some commenters suggested that any federal right be similarly limited,[210] others urged that it should cover both commercial and non-commercial uses,[211] noting the range of harms that can arise from unauthorized replicas.[212] As the Brooklyn Law Incubator & Policy Clinic ("BLIP") and National Public Radio ("NPR") pointed out, the creators of deepfakes do not always act for financial gain,[213] and deception can be harmful regardless of commercialization.[214] Moreover, distinguishing between commercial and non-commercial contexts can be challenging, especially in today's online environment. For example, social media posts that appear to be an individual's personal expression may be part of a paid influencer campaign in support of a commercial interest.[215]

The Office agrees that harmful uses of digital replicas are not limited to those that are commercial in nature. In fact, the commercial use requirement in many state laws is frequently cited as a major reason why these laws are unable to provide adequate protection.[216] We recommend that a federal digital replica law should encompass both non-commercial and

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[209] *See supra* Section II.A.1.

[210] *See, e.g.*, INTA Initial Comments at 10 ("To be actionable, the use at issue should be for commercial purposes, and a direct connection between the use and the commercial purpose must exist."); Law Office of Seth Polansky Initial Comment at 37.

[211] *See, e.g.*, BLIP, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 32 (Oct. 30, 2023) ("BLIP Initial Comments") ("[C]onsidering the breadth of content on which AI systems can be trained, when it comes to infringement of the right of publicity through the use of AI systems, commercial use should not be a required element."); David Newhoff Initial Comments at 5.

[212] *E.g.*, Artist Rights Alliance & Future of Music Coalition Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3 (Dec. 6, 2023) ("[T]he harms go deeper still. Just last week, reports surfaced of a generative AI engine used to create non-consensual pornographic images, including those depicting 'several multiplatinum Grammy Award-winning singer-songwriters and Academy Award-winning actresses' among others. And reports of other forms of deepfake harms such as cyber bullying, impersonation scams, and revenge porn are well-known.").

[213] *E.g.*, BLIP Initial Comments at 32 ("[S]ometimes the end-users do not produce [deepfakes] for commercial purposes, but for creativity or maliciousness.").

[214] *E.g.*, NPR, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 9 (Oct. 30, 2023) ("NPR Initial Comments").

[215] *See* Stacey M. Lantagne, *Famous on the Internet: The Spectrum of Internet Memes and the Legal Challenge of Evolving Methods of Communication*, 52 U. RICH. L. REV. 387, 416–17 (2018) ("[C]ommercial use on the internet—especially on social media—can be a complicated question. . . . In fact, everything on social media is advertising at some level—a level that has become increasingly difficult to determine." (footnotes omitted)).

[216] *See, e.g.*, WME Initial Comments at 5 ("Here too, there is often limited recourse. Right-of-publicity laws are generally limited to commercial uses, leaving it unclear whether they apply to fan-generated deepfakes that were not created for profit or for commercial distribution.").

commercial uses. In this respect, the law would incorporate aspects of the right of privacy, which typically guards against non-economic damage.[217]

(ii) Knowledge Standard

Although the Office did not receive many comments on this issue, we recommend adoption of an actual knowledge standard for direct liability.

Under the actual knowledge standard, liability would attach only where the distributor, publisher, or displayer acted with actual knowledge both that the representation in question was a digital replica of a real person, and that it was unauthorized. An objective or "should have known" standard might ensnare unsuspecting or technologically unsophisticated defendants. Given the volume of potential outputs produced by current technologies, and the number of individuals who could be targeted, there are likely to be cases where a user passes along an image or audio recording without realizing that it is a replica of someone's voice or likeness.[218] And even where the user recognizes the subject of a digital replica, they may not be aware that the replica is inauthentic or unauthorized.

Some commenters proposed the stricter standard of intent to deceive. NPR, for instance, argued that "Congress should adopt a narrow law that creates liability in instances where someone's name, image, likeness, or voice is used with intent to deceive the audience to believe that false, faked, or AI-generated content is true or represents actual facts or event[s]. . . . Liability would turn on intentional deceptiveness—that something is fake but is trying to persuade someone otherwise."[219] The Office notes, however, that there may be no intent to deceive in some situations where liability should attach, such as where an unauthorized digital replica is used to harass or ridicule an individual, or to profit from the replica of a popular

[217] *See supra* Section II.A.1.a.

[218] *E.g.*, Public Knowledge, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 20 (Oct. 30, 2023) ("[A]ny universally-available right needs to adequately address the 'digital doppelganger' problem—namely, ways of dealing with situations in which an AI-generated work, by pure mathematical chance, looks or sounds like an otherwise unknown individual. Such instances should not give rise to liability, or trigger a rabbit hole of provenance questions about the training data of the GAI system that generated the accidental lookalike.").

[219] NPR Initial Comments at 9–10.

performer's voice or image.[220] Proof of subjective intent is also a high barrier to meet when seeking to prevent damaging distributions of unauthorized replicas.[221]

(iii) Secondary Liability

Since digital replicas are generally distributed and displayed online through the services of various intermediaries, the treatment of secondary liability will be an important element of a new federal law.

Traditional secondary liability principles from copyright law may be drawn on here. Pursuant to these principles, a defendant may be contributorily liable if it "with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another."[222] Vicarious liability may be found if the defendant "profits directly from the infringement and has a right and ability to supervise the direct infringer."[223] And a defendant may be liable for inducing infringement where it "distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement."[224]

While these principles could apply in a variety of cases,[225] most of the comments on this topic related to online service providers ("OSPs") that transmit, cache, host, or link to user content. In several areas, Congress has provided OSPs with special safe harbors against liability for unlawful conduct by their subscribers. The most far-reaching example is Section 230 of the Communications Decency Act of 1996, which immunizes online platforms from civil liability for

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[220] In some recent instances where popular artists' voices (both living and deceased) have been cloned without authorization, the rights owners' objections do not appear to depend on whether the unauthorized use was intended to deceive. *See, e.g.*, Vicky Wong & Bonnie McLaren, *Drake: AI Tupac track gone from rapper's Instagram after legal row*, BBC News (Apr. 26, 2024), https://www.bbc.com/news/newsbeat-68904385.

[221] *See* David Crump, *What Does Intent Mean?*, 38 HOFSTRA L. REV. 1059, 1071–72 (2010) ("[I]ntent, of course, cannot be seen directly by witnesses. It eludes all five senses. It is known only to the actor, and even here, only sometimes, because some definitions of intent allow the actor to readily believe that there is no intent, even when there is. . . . [T]he law evaluates intent by what the actor does, which means that the law evaluates intent by circumstantial evidence. At the same time, intent is easily denied or rebutted, even when it exists, and sometimes the denial is accompanied by convincing belief on the part of the actor."); *cf.* Thomas O. Depperschmidt, *Bankruptcy for Gamblers: The Questions of Fraudulent Intent, Dischargeability, and Remedial Policy in Credit Card Cash Advance Cases*, 13 BANKR. DEV. J. 389, 403–04 (1997) (concerning the difficulty of establishing intent in fraud cases).

[222] *Co-Star Grp. Inc. v. LoopNet, Inc.*, 373 F.3d 544, 550 (4th Cir. 2004).

[223] *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 930 n.9 (2005).

[224] *Id.* at 919, 936–37.

[225] For example, the trafficking in devices tailored to create digital replicas might be addressed through secondary liability. *Cf.* No AI FRAUD Act, H.R. 6943, 118th Cong. § 3(c)(1)(A), (C) (2024) (establishing liability for distributing, and for facilitating the distribution of, services for creating digital replicas).

many types of illegal third-party content.[226] It provides that an OSP shall not be treated as the "publisher or speaker" of content provided by others, and that neither OSPs nor their users shall be liable for "any action voluntarily taken in good faith to restrict access to or availability of material that the provider or user considers to be obscene, lewd, lascivious, filthy, excessively violent, harassing, or otherwise objectionable, whether or not such material is constitutionally protected."[227]

Section 230 includes a significant carve-out; it does not "limit or expand any law pertaining to intellectual property."[228] Commenters had differing views on whether a federal digital replica law would constitute a "law pertaining to intellectual property" carved out from section 230.[229] Some favored including the law within the scope of immunity in order to support online platforms' ability to make moderation decisions and avoid chilling protected speech.[230] Electronic Frontier Foundation ("EFF"), for example, argued that "Congress should clarify that the right of publicity sounds in privacy and is not 'intellectual property' for purposes of Section 230" because "when platforms must fend off expensive lawsuits to protect user speech, they are likely to cave to censorious demands."[231]

Others asserted that including digital replica protection in the intellectual property carve-out is necessary to incentivize platforms to remove infringing material.[232] Several pointed to experiences under current law with OSPs refusing requests to remove AI-generated content violating state rights of publicity, citing section 230.[233]

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[226] 47 U.S.C. § 230; *see Hepp v. Facebook*, 14 F.4th 204, 209 (3d Cir. 2021) (Section 230 "encourages [internet] companies to host and moderate third-party content by immunizing them from certain moderation decisions.").

[227] 47 U.S.C. § 230.

[228] 47 U.S.C. § 230(e)(2).

[229] *See, e.g.*, DiMA, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6 (Oct. 30, 2023) ("DiMA Initial Comments"); A2IM-Recording Academy-RIAA Joint Reply Comments at 18; Jennifer Rothman Initial Comments at 4–5.

[230] *See, e.g.*, EFF, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 7 (Oct. 30, 2023) ("EFF Initial Comments"); *see also* DiMA Initial Comments at 6.

[231] *See, e.g.*, EFF Initial Comments at 7; *see also* DiMA Initial Comments at 6 (DiMA "strongly believes that any such right should not be deemed a form of 'intellectual property . . . .").

[232] *See, e.g.*, UMG Initial Comments at 94; SAG-AFTRA Initial Comments at 7; A2IM-Recording Academy-RIAA Joint Reply Comments at 18.

[233] *See, e.g.*, UMG Initial Comments at 94; *see also* SAG-AFTRA Initial Comments at 7; *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Robert Kyncl, Chief Executive Officer, Warner Music Group, in response to QFRs from Sen. Thom Tillis) ("Some platforms have responded to our requests for removal and some have resisted. . . . Some have argued that under Section 230 . . . they are not required to remove them.").

The Copyright Office believes that exclusion from section 230 is advisable to encourage prompt removal of unauthorized digital replicas from online platforms. In many circumstances, OSPs are best positioned to prevent the continuing harm from the availability of such replicas.[234] For example, the disseminators may be anonymous or unreachable,[235] making it impossible to take direct action against them, either informally or through court action. OSPs should be incentivized to assist in removing the replicas once they know they are unauthorized and protected from liability when they do so.

Open AI advocated for "a form of safe harbor . . . for technology providers that do not induce users to create non-consensual digital replicas and take proactive steps to monitor and mitigate harmful uses."[236] Some commenters proposed a notice-and-takedown framework similar in concept to section 512 of the Digital Millennium Copyright Act.[237] This provision encourages copyright owners and OSPs to cooperate "to detect and deal with copyright infringement"[238] by providing qualifying OSPs with immunity from monetary liability for copyright infringement committed by their users.[239] The safe harbors for hosting or linking to infringing content are conditioned upon (among other things) a requirement that the OSP act expeditiously to remove allegedly infringing content upon receiving a valid notification or otherwise becoming aware of the infringing activity.[240]

A number of commenters suggested a safe harbor that differs from section 512 in various respects. DiMA, for instance, argued that if a digital replica law allows for secondary liability, then a safe harbor ought to provide "complete immunity when a service removes

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[234] Recently, YouTube announced a program allowing individuals to demand a takedown of image and voice deepfakes. Dylan Smith, *YouTube Unveils New AI Likeness Protections—Covering Soundalike Audio and More—for 'Uniquely Identifiable' First Parties*, DIGI. MUSIC NEWS (July 2, 2024), https://www.digitalmusicnews.com/2024/07/02/youtube-ai-protections/.

[235] The hurdles rightsholders face to identify infringers was the subject of a number of comments in the Office's Section 512 Study. *See* U.S. COPYRIGHT OFFICE, SECTION 512 OF TITLE 17 164 (2020) ("SECTION 512 REPORT"), https://www.copyright.gov/policy/section512/section-512-full-report.pdf.

[236] *See* Letter from OpenAI, Summary of *Ex Parte* Meeting on May 28, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 4 (June 4, 2024).

[237] *See, e.g.*, *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Lisa P. Ramsey, Professor of Law, University of San Diego School of Law, in response to QFRs from Sen. Tillis).

[238] H.R. REP. NO. 105-551, pt. 2, at 49 (1998).

[239] U.S. COPYRIGHT OFFICE, SECTION 512 OF TITLE 17 13–21 (2020) ("SECTION 512 REPORT"), https://www.copyright.gov/policy/section512/section-512-full-report.pdf.

[240] *See* 17 U.S.C. § 512(c)–(d).

specifically identified content upon notice."[241] Warner Music Group, by contrast, requested a framework that conditions safe harbor on platforms' not only taking content down, but ensuring that it stays down.[242]

The Office agrees that a notice and takedown system, combined with an appropriate safe harbor, could be an effective approach. Such a system need not duplicate every element of section 512. In our 2020 report on section 512, we observed that some of its provisions were not working as Congress had intended;[243] the experience gained in that context could inform the design of a safe harbor here. The Office recommends conditioning its availability on the OSP expeditiously removing the digital replicas when it has actual knowledge or has received a sufficiently reliable notification that the replica is infringing. We would not, however, import the DMCA's "red flag" knowledge standard, given its interpretive problems in the copyright context.[244]

e) Licensing and Assignment

A digital replica law should address whether rights can be transferred either by assignment or licensing.[245] While the Office did not receive many comments on these issues, they were discussed in congressional hearings, and we have considered that testimony as part of our analysis.[246]

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[241] *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Graham Davies, President & Chief Executive Officer, DiMA, in response to QFRs from Sen. Thom Tillis).

[242] *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Robert Kyncl, Chief Executive Officer, Warner Music Group, in response to QFRs from Sen. Thom Tillis); *see also id.* (statement of Duncan Crabtree-Ireland, National Executive Director, SAG-AFTRA, in response to QFRs from Sen. Thom Tillis).

[243] *See* SECTION 512 REPORT at 2–6.

[244] *See id.* at 113–20.

[245] The Office uses the terms assignment and licensing here in the same sense as in the copyright context. An assignment is an outright sale or transfer of all rights to another party, who then controls the use and distribution of those rights going forward. A license is a contractual permission, either exclusive or nonexclusive, for the use of a digital replica, which may include limitations such as the duration of the license and the uses licensed.

[246] *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop.*, 118th Cong. (2024) (statement of Robert Kyncl, Chief Executive Officer, Warner Music Group); *id.* (statement of Lisa P. Ramsey, Professor of Law, University of San Diego School of Law); *Artificial Intelligence and Intellectual Property: Part II—Identity in the Age of AI: Hearing Before the Subcomm. on Cts., Intell. Prop., & the Internet of the H. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Dana Rao, Executive Vice President, General Counsel, & Chief Trust Officer, Adobe, Inc.); *Artificial Intelligence and Intellectual Property: Part II—Identity in the Age of AI: Hearing Before the Subcomm. on Cts., Intell. Prop., & the Internet of the H. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Jeff Harleston, General Counsel & Executive Vice President, UMG).

Commenters in favor of assignability asserted that a digital replica right should be treated no differently than other intellectual property rights, such as copyrights, trademarks, and patents. UMG, for instance, stated that "it is important that . . . as with all forms of intellectual property, [a digital replica] right should be eligible for assignment or licensing either in whole or in part, so that enforcement may be delegated."[247] INTA likewise argued that digital replica "rights should be freely transferable, licensable and descendible property rights."[248]

Others raised concerns about the abuses that could occur if individuals were permitted to fully assign their rights, thereby permanently losing control over how their image is used. Professor Jennifer Rothman stated that "[a]llowing another person or entity to own a living human being's name, likeness, voice, or other indicia of a person's identity in perpetuity poses a significant threat to a person's fundamental rights and liberty, and should be prohibited."[249]

Most commenters favored the ability to license digital replica rights, but with different views on whether there should be any limitations and what the limitations should be. The MPA supported broad freedom to contract, including through licensing.[250] Professor Lisa Ramsey warned, however, that "[i]f digital replica right licenses are not limited in significant ways, this will undermine the objectives of [a digital replica law], which include preventing public deception and protecting the ability of people to control uses of their identity."[251] Duncan Crabtree-Ireland, National Executive Director, SAG-AFTRA, argued that licensing guardrails are needed and described those negotiated by the guilds in 2023 as "model provisions for protection against abuse."[252]

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[247] UMG Initial Comments at 95.

[248] INTA Initial Comments at 11.

[249] Jennifer Rothman Initial Comments at 5; *see also The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Lisa P. Ramsey, Professor of Law, University of San Diego School of Law); *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary,* 118th Cong. (2024) (statement of FKA twigs, Singer, Songwriter, Producer, Dancer, and Actor, in response to QFRs from Sen. Thom Tillis) ("[T] he importance of limiting licensing agreements in time subject to reasonable renewable contractual terms and conditions must be made clear and provided for. There should be no suggestion of or opportunity for licensed rights being given in perpetuity.").

[250] *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Benjamin Sheffner, Senior Vice President & Associate General Counsel, MPA, in response to QFRs from Sen. Thom Tillis).

[251] *Id.* (statement of Lisa P. Ramsey, Professor of Law, University of San Diego School of Law, in response to QFRs from Sen. Thom Tillis); *id.* (statement of FKA twigs, Singer, Songwriter, Producer, Dancer, and Actor, in response to QFRs from Sen. Thom Tillis).

[252] *See id.* (statement of Duncan Crabtree-Ireland, National Executive Director, SAG-AFTRA, in response to QFRs from Sen. Thom Tillis).

Having considered these views, the Office recommends that individuals be able to license their images and voices for use in digital replicas but not to fully assign all rights. Licensing can facilitate the creation, distribution, and use of creative works, products, and services. It enables individuals who choose to do so to monetize and profit from their own personas.

At the same time, the Office acknowledges the potential for abuse. Given unequal contracting power or knowledge, particularly in the context of employment or talent contracts, individuals may lose control over their own personas for long periods of time or under broad terms, based on a decision made early in their career. Although assignments are common in other areas of intellectual property, digital replica rights are most appropriately viewed as a hybrid of privacy interests and a form of property. Unlike publicity rights, privacy rights, almost without exception, are waivable or licensable, but cannot be assigned outright.[253] Accordingly, we recommend a ban on outright assignments, and the inclusion of appropriate guardrails for licensing, such as limitations in duration and protection for minors.

(i) Duration

To avoid the effective result of an outright assignment, the Office suggests limiting licenses (other than those collectively bargained) to a relatively short term, such as five or ten years.[254] Parties that wish to continue the licensing arrangement could subsequently renegotiate it—allowing for consideration of changed circumstances, including bargaining power.

In adopting a time limitation, care should be taken not to block the ongoing use of content produced lawfully during the period of the license. In creative industries, an owner of digital replica rights is often not the owner of the copyrighted works that incorporate that replica. Similarly, the licensed digital replica may be incorporated into a product that the licensee has invested in with a reasonable expectation of continued distribution, such as packaging or labeling of consumer goods.[255]

Accordingly, we believe that the lapse of a digital replica license should bar only new uses after the expiration of the license period. In other words, if a singer consents to a record label using a digital replica of her voice for a period of years, when that period ends, the label would be prohibited from making new recordings using a digital replica (absent a subsequent

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[253] *See* 2 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY §§ 10:1, 10:2 (2d ed. 2024).

[254] Jennifer Rothman Initial Comments at 6; *see, e.g.*, CAL. LAB. CODE § 2855(a) (West 2024) ("a contract to render personal service, other than a contract of apprenticeship . . . may not be enforced against the employee beyond seven years from the commencement of service under it").

[255] For example, a company's trademark or product packaging may include the image of an individual, such as Gerber's use of an image of a baby on its baby food packaging, or General Mills' use of images of athletes on its Wheaties cereal boxes.

agreement). It could, however, continue distribution of recordings that were prepared during the contractual period.[256]

(ii) Informed Consent

Reflecting the personal aspects of a digital replica right and the risks of public confusion, the Office believes that a federal statute should ensure that individuals licensing their rights are doing so with adequate knowledge and full disclosure of the intended uses. SAG-AFTRA's collective bargaining agreement provides an example: it requires contract terms regarding digital replica rights to be "clear and conspicuous" and agreed to in a separate contract or rider, or in some other form that stands out prominently.[257] We also note that other federal and state laws offer examples of similar terms required in contracts where personal rights are at issue.[258]

(iii) Contracts with Minors

A number of commenters emphasized the unequal bargaining power of minors.[259] They proposed restrictions on such contracts, including requiring that licenses involving minors would automatically expire when they reach the age of 18, and be subject to procedural safeguards such as court review and holding income in a trust.[260] The Office agrees that such safeguards are advisable.

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[256] This approach is similar to how copyright law treats derivative works after termination of a grant, allowing those already prepared to continue to be utilized. *See* 17 U.S.C. §§ 203, 304(c), 304(d) (2022). As the Office has explained, a "derivative work prepared under authority of the grant before its termination may continue to be utilized under the terms of the grant after its termination, but this privilege does not extend to the preparation after the termination of other derivative works based upon the copyrighted work covered by the terminated grant." *See id.* § 203; *Notices of Termination*, U.S. COPYRIGHT OFFICE, https://www.copyright.gov/recordation/termination.html (last visited July 21, 2024).

[257] In its FAQs on digital replica rights, SAG-AFTRA explains that "this could mean [a digital replica provision] is in a separate rider or it could be in your contract as long as it clearly stands out, such as in a larger font, ALL CAPS or **bold**. . . . A bolded paragraph granting consent, alone, is not sufficient." *FAQs on AI*, SAG-AFTRA, https://www.sagaftra.org/files/sa_documents/AIFAQs.pdf (last visited July 21, 2024).

[258] For instance, the Age Discrimination in Employment Act requires a range of contractual safeguards for employees entering into certain severance and settlement agreements. *See* Older Workers Benefit Protection Act, Pub. L. No. 101-433, 104 Stat. 978 (codified as amended in scattered sections of 29 U.S.C.A.). Under this statute, agreements must explicitly advise the contracting party to consult an attorney before signing and must be written in plain, clear language that the contracting party can understand and not exaggerate any benefits.

[259] *See, e.g.*, Jennifer Rothman Initial Comments at 6 (stating that "[t]he most egregious licenses are likely to involve those with the least bargaining power," and highlighting children as a particularly vulnerable group currently lacking control over these rights).

[260] *E.g.*, *id.* For example, California requires that a court confirm entertainment or sports personal services contracts involving minors. CAL. FAM. CODE §§ 6750, 6751 (West 2024) ("A contract, otherwise valid, of a type described in

f) First Amendment Concerns

Digital replicas may be used in the context of constitutionally protected speech, including news reporting, artistic works, parody, and political opinion, in ways that may be unauthorized and objectionable. Federal legislation in this area will need to take into account the speech interests protected by the First Amendment.[261]

The First Amendment, however, does not protect all speech equally. While the Supreme Court has acknowledged that "some false statements are inevitable if there is to be an open and vigorous expression of views in public and private conversation, expression the First Amendment seeks to guarantee,"[262] it has permitted restrictions in cases of defamation,[263] fraud,[264] and commercially misleading speech[265]—each of which could be implicated by certain uses of unauthorized digital replicas.

In applying state rights of publicity, courts have acknowledged the tension between an individual's right to control their persona and a third party's free speech rights.[266] However, the outcomes in these cases are not consistent, leading to a lack of predictability. The application of First Amendment principles in right of publicity cases has been described by scholars as "a confusing morass of inconsistent, incomplete, or mutually exclusive approaches, tests, and

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Section 6750, entered into during minority, cannot be disaffirmed on that ground either during the minority of the person entering into the contract, or at any time thereafter, *if the contract has been approved by the superior court* in any county in which the minor resides or is employed or in which any party to the contract has its principal office in this state for the transaction of business." (emphasis added)).

[261] *See, e.g.*, *The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Benjamin Sheffner, Senior Vice President & Associate General Counsel, MPA) ("[C]reation of a new right that would apply in expressive works raises serious First Amendment concerns and risks interfering with core creative freedoms.").

[262] *United States v. Alvarez*, 567 U.S. 709, 718 (2012).

[263] *United States v. Stevens*, 559 U.S. 460, 468 (2010) (citations omitted). Defamation claims involving public officials and public figures must meet a higher standard, however. *See N.Y. Times v. Sullivan*, 376 U.S. 254 (1964) (defamatory statements about public officials are protected by the First Amendment unless they are made with actual malice); *Curtis Publ'g Co. v. Butts*, 388 U.S. 130, 155 (1967) (applying *Sullivan* to public figures).

[264] *Stevens*, 559 U.S. at 468 (citations omitted).

[265] *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n of N.Y.*, 447 U.S. 557, 566 (1980) (false or misleading commercial speech falls outside of the First Amendment).

[266] *See, e.g., Zacchini v. Scripps-Howard Broad. Co.*, 433 U.S. 562, 574–75 (1977) (acknowledging the tension between a news broadcaster's First Amendment rights and a performer's right of publicity, holding that First and Fourteenth Amendments "do not immunize the media when they broadcast a performer's entire act without his consent . . . "); *see also Comedy II Productions, Inc. v. Gary Saderup*, 25 Cal.4th 387, 397 (Cal. 2001) ("The right of publicity derived from public prominence does not confer a shield to ward off caricature, parody and satire. Rather, prominence invites creative comment.") (quoting *Guglielmi v. Spelling-Goldberg Prods.*, 603 P.2d 454, 460 (Cal. 1979) (Bird, C.J., concurring)).

standards"[267] or, more succinctly, a "dumpster fire."[268] At least five different balancing tests are in use by courts in different states across the country,[269] producing "conflicting outcomes in cases with similar facts."[270]

Our NOI questions on this issue elicited strong reactions from commenters. Many recognized that a federal law prohibiting unauthorized digital replicas must leave room for First Amendment-protected activity.[271] Commenters, however, disagreed on exactly how a statute should accommodate free speech rights. Some supported specific exceptions similar to those in some state right of publicity statutes, primarily for news reporting, various types of expressive works, and sports broadcasting, as well as parody, comment, and criticism.[272]

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[267] Gloria Franke, *The Right of Publicity vs. the First Amendment: Will One Test Ever Capture the Starring Role?*, 79 S. CAL. L. REV. 945, 946 (2006).

[268] William McGeveran, *Selfmarks*, 56 HOUS. L. REV. 333, 362 (2018).

[269] Roberta Rosenthal Kwall, *A Perspective on Human Dignity, the First Amendment, and the Right of Publicity*, 50 B.C. L. REV. 1345, 1346 (2009); *see also* Robert C. Post & Jennifer E. Rothman, *The First Amendment and the Right(s) of Publicity*, 130 YALE L. J. 86, 127 n.167 (2020).

[270] JENNIFER E. ROTHMAN, THE RIGHT OF PUBLICITY 145, 147 (2018).

[271] *See, e.g.*, Senator Marsha Blackburn Initial Comments at 3 ("This liability must be balanced, of course, by significant protections for any applicable First Amendment rights."); International Center for Law & Economics, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 26 (Oct. 30, 2023) ("If Congress chose to enact a federal 'right of privacy' statute, several key issues would need to be addressed regarding . . . First Amendment limitations."); Digital Media Licensing Association, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 20–21 (Oct. 30, 2023) ("The right to create content for newsworthy and expressive purposes that are guaranteed under the First Amendment must be considered and balanced with the concerns of the public including actors and other public figures."); Internet Archive Initial Comments at 11–12 ("[G]ranting a new right of publicity along the lines of existing state laws . . . come with serious First Amendment concerns."); Pamela Samuelson et al., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 37 (Oct. 30, 2023) ("Pamela Samuelson Initial Comments") (advocating for "thoughtful self-regulation in [addressing the issue of deepfakes]," but expressing skepticism about the feasibility of imposing rules due to potential conflicts with the First Amendment).

[272] *See, e.g.*, Getty Images, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 28 (Oct. 30, 2023) ("Getty Images Initial Comments") ("[A]ny new federal right of publicity should be carefully considered so that constitutionally protected expression is not unduly limited. Accordingly, legislation should include explicit exemptions for First Amendment-protected expression."); MPA, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 33 (Dec. 6, 2023) ("MPA Reply Comments") ("At minimum, a bill establishing a federal digital-replica right must include exemptions where the use is in a work of political, public interest, educational, or newsworthy value, including comment, criticism, or parody, or similar works, such as documentaries, docudramas, or historical or biographical works, or a representation of an individual as himself or herself, regardless of the degree of fictionalization, and for uses that are de minimis or incidental."); INTA Initial Comments at 11 (proposing exceptions for "a. News, public affairs and sports reporting or commentary; b. Dramatic, literary, artistic, or musical works, so long as the use has artistic relevance to the work and does not explicitly mislead as to endorsement or approval by the individual; c. Works that parody, criticize, satirize or comment upon the individual; d. Advertising and promotion for (a)-(c); and (e). Any other noncommercial use, including, but not limited to, education and research").

Protection for expressive works was a principal area of focus.[273] The MPA offered several examples of expressive uses as deserving of protection, including documentaries using digital replicas "to re-create scenes from history where no actual footage exists" and late-night comedians "using digital replicas to poke fun at celebrities, politicians, athletes."[274] It asserted that categorical exceptions "are crucial to giving filmmakers clarity so they know what uses are allowed, or not allowed" before they undertake expensive projects, and proposed a list of exceptions, some subject to the caveat that the use was not intended to and did not create a false impression of authenticity.[275] Donaldson Callif Perez LLP stated that "the implementation of a right that does not explicitly exempt expressive works would have immediate negative consequences."[276]

Other commenters argued that categorical exceptions are unnecessary and could undermine effective protection. RIAA asserted that "categorical exclusions for certain speech-oriented uses are not constitutionally required and, in fact, risk overprotection of speech interests at the expense of important publicity interests."[277] Instead, "the First Amendment calls for a case-specific balancing of the right of publicity against whatever First Amendment

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[273] *See* MPA, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 71 (Oct. 30, 2023) ("MPA Initial Comments") ("The right of publicity does not—and, to be consistent with the First Amendment, may not—regulate uses of or references to individuals' [name, image and likeness] in 'expressive works,' such as books, plays, news articles and broadcasts, songs, and movies and television programs. Such expressive works are non-commercial speech fully protected by the First Amendment, regardless of whether those works are sold for a profit."); David Newhoff Initial Comments at 5 ("If ROP law is expanded, it should . . . not restrict expressive uses of AI-generated likeness for purposes (e.g., biographical films) that fall within the scope of protected speech.").

[274] MPA Reply Comments at 32.

[275] Letter from MPA, Summary of *Ex Parte* Meeting on May 13, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 4 (May 20, 2024) ("Use of a digital replica would not constitute a violation where: 1. the digital replica is used to depict the individual in a documentary, docudrama, or historical or biographical work, or any other representation of the individual as such individual, regardless of the degree of fictionalization, unless use of the digital replica is intended to create, and does create, the false impression that the work is an authentic recording in which the individual participated; 2. the digital replica is used for purposes of a news, public affairs, or sports broadcast or report, or for a purpose that has political, public interest, educational, or newsworthy value, unless use of the digital replica is intended to create, and does create, the false impression that the work is an authentic recording in which the individual participated; 3. the use of the digital replica is for purposes of comment, criticism, scholarship, satire, or parody; 4. the use of the digital replica is de minimis, incidental, or fleeting; 5. the use of the digital replica is addressed by a collective bargaining agreement; or 6. the digital replica is used in an advertisement or commercial announcement for a work that includes the use of the digital replica as described in [1 through 5].").

[276] Donaldson Callif Perez, LLP, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10 (Oct. 30, 2023).

[277] *E.g.*, Letter from RIAA, Summary of *Ex Parte* Meeting on April 23, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 2 (Apr. 29, 2024).

interests may be presented in the given case."[278] Professor Jennifer Rothman suggested that a new law be specific regarding uses that would not be Constitutionally privileged: "Current common areas of agreement are that unauthorized uses of a person's identity are not protected by the First Amendment if a person's 'entire act' or performance is used, or the uses are in commercial products or advertising not related to an authorized underlying work."[279]

Each of these approaches has advantages and disadvantages. Enumerated exceptions provide greater certainty: users can more easily determine from the face of the statute whether the use they are considering is lawful. In addition, the existing bodies of state precedent are available to be drawn upon for purposes of interpretation. But such exceptions may be both over- and under-inclusive depending on the facts.[280] For example, an exception for expressive works, if not appropriately cabined, could render the law toothless against common uses of digital replicas—such as voice clones in music or deepfake pornography. Indeed, many of the problematic uses reported have been in expressive or political contexts, such as the "Fake Drake" song and the President Biden robocalls described above.[281]

The Office stresses the importance of explicitly addressing First Amendment concerns. While acknowledging the benefits of predictability, we believe that in light of the unique and evolving nature of the threat to an individual's identity and reputation, a balancing framework is preferable. Although the potential overbreadth of categorical exceptions can be cabined by conditions like those proposed by MPA, this introduces a high level of complexity. In addition, we note that in today's online environment, traditional categories such as "news" or "public affairs" are often difficult to define.[282] The result may be to exempt conduct that legislators intended to prohibit.

In our view, a balancing framework permits greater flexibility to assess whether a particular unauthorized use is protected by the First Amendment. Rather than checking a box marked "news" or "musical work," courts can assess the full range of factors relevant to the First Amendment analysis. These could include the purpose of the use, including whether it is

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[278] A2IM-Recording Academy-RIAA Joint Reply Comments at 16–17; *see also id.* at 17 ("[W]e disagree with those commenters who argue that any federal right of an individual to control uses of their voice or likeness must contain express, categorical exclusions for all uses of a certain type, such as unauthorized uses of an individual's voice or likeness in any 'expressive works,' regardless of the particular facts and circumstances of the use.").

[279] Jennifer Rothman Initial Comments at 6.

[280] *See* Joshua Matz, RIGHT OF PUBLICITY AND THE FIRST AMENDMENT (2024), humanartistrycampaign.com/rop-first-amendment; Letter from RIAA, Summary of *Ex Parte* Meeting on April 23, 2024 Regarding the Office's AI Study, to U.S. Copyright Office (Apr. 29, 2024) (endorsing Matz's view).

[281] *See supra* Section I.

[282] Indeed, the meanings of categories like "news" or "public affairs" are themselves contested. *See* Richard L. Hansen, *From Bloggers in Pajamas to The Gateway Pundit: How Government Entities Do and Should Identify Professional Journalists for Access and Protection* (2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4776774; Sonja R. West, *Favoring the Press*, 106 CAL. L. REV. 91 (2018).

commercial; its expressive or political nature; the relevance of the digital replica to the purpose of the use; whether the use is intentionally deceptive; whether the replica was labeled; the extent of the harm caused; and the good faith of the user.[283] We believe that this approach would leave room for the types of expressive works that many commenters identified as a priority.[284]

g) Remedies

A federal right must offer effective remedies through which individuals can seek redress. Several commenters proposed a range of appropriate remedies, including monetary and injunctive relief.[285]

The Office agrees that a digital replica law should provide both monetary and injunctive relief. Damages should include compensation for loss of income, damage to reputation, or emotional distress. As INTA commented, "[t]he commercial value of a persona may have an impact on any damage amount claimed in a dispute."[286] Injunctive relief is essential to prevent ongoing unauthorized use of an individual's likeness or to prevent future violations.

We note that some individuals may have difficulty proving actual damages, particularly market-based injuries, in court. To ensure that protection is both accessible and effective for all, the Office recommends inclusion of special damages enabling recovery by those who may not be able to show economic harm or afford the cost of an attorney.[287] As in the copyright system,

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[283] *See* 1 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY §§ 8:23, 8:71–3 (2d ed. 2024); A2IM-Recording Academy-RIAA Joint Reply Comments at 16–17 ("[T]he First Amendment calls for a case-specific balancing of the right of publicity against whatever First Amendment interests may be presented in the given case.").

[284] Importantly, application of these factors should permit a movie to use unauthorized digital replicas of deceased individuals where those individuals are portrayed in objectively unrealistic, fictionalized contexts. As an example, a remake of the movie *Bill & Ted's Excellent Adventure*, in which the protagonists use a time machine to interact with and transport historical figures (portrayed by digital replicas) into modern times, should not require authorization. *See Synopsis, Bill & Ted's Excellent Adventure*, IMDB, https://www.imdb.com/title/tt0096928/plotsummary/#synopsis (last visited July 21, 2024).

[285] *See, e.g.*, Law Office of Seth Polansky Initial Comments at 37 ("Enforcement mechanisms would also need to be specified, through both civil remedies and criminal penalties. Given the rapid speed at which AI-generated material can be created and distributed, it is crucial for enforcement measures to be timely and effective."); SAG-AFTRA Initial Comments at 7–8 ("Monetary relief . . . might include lost wages and reputational damage. Injunctive relief must also be available, particularly in the context of AI-generated content that might impact one's reputation (such as AI-generated voice or likeness used to sell shoddy merchandise or questionable services).").

[286] INTA Initial Comments at 11.

[287] Jennifer Rothman Initial Comments at 5 ("Any legislation should include statutory damages to protect people who may not otherwise be able to establish market-based injuries. A number of states have included statutory damages in publicity legislation with the express purpose of protecting ordinary people.").

without the potential for statutory damages or attorney's fee awards to the prevailing party, litigation costs may be a barrier to the filing of meritorious claims.

Several commenters urged the inclusion of criminal penalties,[288] particularly in connection with nonconsensual intimate material.[289] Criminal liability would recognize the seriousness of the harm caused by such actions and the need for accountability; appropriate penalties could deter bad actors and provide justice for victims. The Office agrees that there are specific unauthorized uses that should incur criminal liability, including sexual deepfakes and other particularly harmful or abusive imagery. We do not take a position, however, on whether criminal penalties should be included in a federal digital replica right as opposed to stand-alone criminal legislation, such as the bills pending in this Congress.[290]

h) Preemption

An overarching question is whether, and to what extent, a federal digital replica law should preempt state laws.[291] Commenters were divided on this issue, with some urging preemption and others seeking to preserve state flexibility.

The benefit of preempting state laws as they pertain to digital replicas would be to establish a uniform nationwide standard, entirely replacing the patchwork of existing coverage. Commenters who supported this approach asserted that it would provide clarity for creators, businesses, and consumers alike.[292] DiMA, for example, stated that "Congress should ensure that content related matters have consistent standards by preempting state and common laws where doing so would ensure consistency in application and reduce operational challenges and improve the customer experience."[293] MPA also urged preemption to "provide national uniformity."[294]

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[288] *See, e.g.*, NPR Initial Comments at 10 ("Criminal penalties may be necessary."); Walker Wambsganss et al. Initial Comments at 5.

[289] *E.g.*, Anonymous AI Technical Writer, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 17 (Dec. 6, 2023) ("At minimum the right to not have one's face used in generative AI, with criminal penalties for nonconsensual pornography and child pornography generated with AI.").

[290] For example, the TAKE IT DOWN Act, introduced in the Senate in June of 2024, would criminalize publishing or threatening to publish non-consensual intimate imagery. TAKE IT DOWN Act of 2024, S.4569, 118th Cong. (2024).

[291] *See generally* CONG. RSCH. SERV., ARTIFICIAL INTELLIGENCE PROMPTS RENEWED CONSIDERATION OF A FEDERAL RIGHT OF PUBLICITY (2024), https://crsreports.congress.gov/product/pdf/LSB/LSB11052.

[292] *See, e.g.*, DiMA Initial Comments at 5; INTA Initial Comments at 9; MPA Reply Comments at 34; BLIP Initial Comments at 32.

[293] DiMA Initial Comments at 5.

[294] MPA Reply Comments at 34.

Commenters opposing preemption stressed the desirability of preserving the extensive body of state law precedent developed over many decades.[295] SONA, Black Music Artists Coalition, and MAC stated that "there is nothing that should warrant preemption of laws that have been thoroughly considered and vetted in our state."[296]

Many proposed that federal law should set a "floor," permitting states to offer broader protection than federal law and displacing only those state laws that fell beneath the federal standard.[297] In testimony before Congress, Warner Music Group advocated for this approach.[298] ImageRights International also urged that the federal right "should set a baseline (floor) for protections, allowing states to provide additional protections if they choose."[299] Dina LaPolt, an entertainment lawyer, stated, "It is important that any potential federal right protecting voice and likeness set a 'floor' of fundamental rights such that states can be individualized in their approach to cater to the potentially more stringent wishes of their residents."[300]

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[295] *See, e.g.*, SAG-AFTRA Initial Comments at 8 (A "federal right should not preempt state right of publicity laws unless it provides individuals greater protections over their name, image, voice, or likeness than existing state law. Further, it is critical that any federal law relating to AI-generated image and/or voice not supersede, whether intentional or inadvertent, existing state law relating to sexually explicit digital replicas."); A2IM-Recording Academy-RIAA Joint Reply Comments at 18 ("[A] federal right should not preempt state law to deprive individuals of rights that have been carefully developed over decades of legislation and litigation."); SONA-MAC-BMAC Joint Initial Comments at 10–11.

[296] SONA-MAC-BMAC Joint Initial Comments at 10–11.

[297] *See, e.g.*, SAG-AFTRA Initial Comments at 8 ("[A]ny federal law should set a floor for state law protections, allowing states to provide greater protection to individuals residing in their state."); Dina LaPolt Initial Comments at 10. Commenters did not use a uniform term for this form of preemption. Some cases and scholars use the term "partial preemption" to describe statutes that create a regulatory floor that state laws can exceed.

[298] *See The NO FAKES Act: Protecting Americans from Unauthorized Digital Replicas: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Robert Kyncl, Chief Executive Officer, Warner Music Group, in response to QFRs from Sen. Thom Tillis) ("[L]imited preemption would be appropriate to the extent of the scope of a new federal right. But state laws that provide enhanced protections and that are supported by decades of helpful jurisprudence regrading protection of voice and likeness should be allowed to stand to the extent they do not conflict with federal law.").

[299] ImageRights International, Inc., Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11 (Dec. 6, 2023).

[300] Dina LaPolt Initial Comments at 10. To the extent that states have developed diverse approaches, this may reflect differences in state industries and interests. For example, California, the domicile of many celebrities, has a retroactive postmortem right that arose in large part due to a ruling denying the descendability of Marilyn Monroe's right of publicity. *See* Laurie Henderson, *Protecting A Celebrity's Legacy: Living in California or New York Becomes the Deciding Factor*, 3 J. BUS. ENTREPRENEURSHIP & L. 165, 171, 177–83 (2009). Similarly, some have observed that Tennessee's potentially perpetual right of publicity may be traceable to the influence of native Tennessean Elvis Presley. Annie T. Christoff, *Long Live the King: The Influence of Elvis Presley on the Right of Publicity in Tennessee*, 41 U. MEM. L. REV. 667, 699 (2011). This is not to say that state variations in right of publicity laws always neatly track local or regional interests. JENNIFER ROTHMAN, THE RIGHT OF PUBLICITY: PRIVACY REIMAGINED FOR NEW YORK?, 592–93 (2018) (noting variation in postmortem rights in the tri-state area).

Alternatively, a non-preemptive law would leave existing state protections in place, regardless of whether those state protections exceeded or fell short of the federal protection. This approach would be similar to the Lanham Act, which leaves state trademark and unfair competition laws coexisting with federal protections.[301]

Although there are reasonable arguments for each approach, the Office recommends against preempting state laws for several reasons. Most importantly, as commenters pointed out, extensive state law in this area has developed over many decades, creating settled expectations.[302] Full preemption would reduce existing protections for individuals in states that currently provide broader rights, causing discrepancies between protection for digital replicas and other imitations of their personas. For example, in a state that provides for postmortem rights of publicity, a preemptive federal law without postmortem rights would result in a deceased individual's beneficiaries having longer-lasting rights in the non-digital context. And there may be advantages in preserving policy flexibility at the state level to respond to rapidly changing conditions, without the need to achieve consensus at the federal level.

Moreover, a non-preemptive federal right can achieve some of the benefits of uniformity, but without imposing a one-size-fits-all solution on all states. Although it would not fully harmonize the varied state approaches, it would fill in the gaps by ensuring the availability of effective national protection against unauthorized uses of digital replicas. Everyone, whatever the status of their own state's law, would have recourse to the same federal claim.

Finally, a non-preemptive law has the advantage of greater clarity. Either full or partial preemption raises the specter of extensive litigation over its scope and the question of which state-level protections remain available. This uncertainty could be minimized by specifying that the federal digital replica law supplements rather than preempts a state's protections.

4. Relationship to Section 114(b) of the Copyright Act

The Office's NOI inquired about the relationship between section 114(b) of the Copyright Act and state law protections against unauthorized digital replicas of voices in sound recordings.[303] Section 114(b) states that the copyright owner's reproduction and derivative work rights in a sound recording are limited to uses that appropriate "the actual sounds fixed in the recording," and "do not extend to the making or duplication of another sound recording that consists entirely of an independent fixation of other sounds, even though such sounds imitate or

[301] *See* J. THOMAS MCCARTHY, 3 MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION §§ 1:18, 22:1 (5th ed. 2024).

[302] *See supra* notes 295–96.

[303] NOI at 59948.

simulate those in the copyrighted sound recording."[304] The provision was intended to clarify that "mere imitation" of a copyrighted sound recording does not constitute infringement.[305]

Because section 114(b) permits imitation or simulation of sounds (including an individual's voice) in the context of a sound recording copyright, some have questioned whether it might preempt state laws that prohibit an unauthorized replica of someone's voice used in a sound recording. Several commenters noted this issue, with one stating that "legislative attention might be necessary to address potential conflicts and gaps in the law" to clarify these relationships.[306]

Only a few courts have analyzed whether section 114(b) preempts a state right of publicity claim based on the imitation of an individual's voice, with varying results. While the Ninth Circuit has twice rejected preemption in cases involving claims for voice misappropriation under California law,[307] a federal court in Michigan concluded a state right of publicity claim was preempted.[308] The uncertainty regarding section 114(b)'s impact appears to be having real-world consequences as state legislatures debate and enact laws with provisions on digital replicas. Presumably to avoid possible inconsistencies with the Copyright Act, both New York and Louisiana included in their recent laws language which mirrors section 114(b) and limits the scope of conduct prohibited by these state laws. These are right of publicity laws that encompass digital replicas in certain instances and not specifically "digital replica laws." Louisiana's statute, for example, exempts from liability "the making or duplication of another recording that consists entirely of an independent fixation of other sounds, even though the

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[304] 17 U.S.C. § 114(b).

[305] H.R. REP. NO. 94-1476, at 106 (1976).

[306] *See, e.g.*, Rightsify Group LLC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 13 (Oct. 30, 2023); *see also* UMG Initial Comments at 98 ("[W]hile UMG maintains that rights of publicity as applied to AI-generated soundalikes are not preempted, the potential for disagreement further counsels in favor of a federal right of publicity that will eliminate debate on this issue."); A2IM and RIAA, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 43–44 (Oct. 30, 2023) ("A2IM-RIAA Joint Initial Comments") ("Case law concerning copyright preemption of rights of publicity is still developing, and we are not aware of any cases addressing that issue in the specific context of AI. Whether courts properly recognize the distinction between Section 114(b) and rights of publicity . . . with respect to generative AI is an issue that warrants attention. Legislative clarification is not clearly necessary but may prove to be helpful.").

[307] *Midler*, 849 F.2d at 462 ("Midler does not seek damages for Ford's use of [a licensed song], and thus her claim is not preempted by federal copyright law. Copyright protects 'original works of authorship fixed in any tangible medium of expression.' A voice is not copyrightable. The sounds are not 'fixed.'"); *Waits*, 978 F.2d at 1100, *abrogated on other grounds by Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 572 U.S. 118 (2014) (finding that the elements of Tom Waits's voice misappropriation claim "are 'different in kind' from those in a copyright infringement case challenging the unauthorized use of a song or recording," and that the claim is not preempted by copyright).

[308] *Romantics v. Activision Publ'g, Inc.*, 574 F. Supp. 2d 758, 764 (E.D. Mich. 2008) (finding that the Copyright Act preempted a right of publicity claim based on use of a band's "distinctive sound" in a videogame, where the "distinctive sound" at issue was that of a copyrighted song rather than the band more generally).

sounds imitate or simulate the voice of the professional performer," and New York's law uses similar language.[309]

In the Office's view, these concerns are misplaced, and section 114(b) does not preempt state laws prohibiting unauthorized voice replicas. The Copyright Act does not preempt state laws with respect to "subject matter that does not come within the subject matter of copyright" or "activities violating legal or equitable rights that are not equivalent to any of the exclusive rights within the general scope of copyright."[310] The legislative history of the Act's preemption provision explains that "[t]he evolving common law rights of 'privacy,' 'publicity,' and trade secrets . . . remain unaffected as long as the causes of action contain elements, such as an invasion of personal rights or a breach of trust or confidentiality, that are different in kind from copyright infringement."[311]

The Office believes that digital replica rights in an individual's voice satisfy this test. An individual's voice, unlike a particular sound recording that may capture it, "does not come within the subject matter of copyright."[312] It is the product of biology, nature, environment, and, in the case of performers, training, skill, and talent. It is not an "original work[] of authorship,"[313] or "fixed in any tangible medium of expression . . . from which [it] can be perceived, reproduced, or otherwise communicated."[314]

Copyright and digital replica rights serve different policy goals; they should not be conflated. Section 114(b) shields vocal imitations and other soundalike recordings against claims of copyright infringement. But nothing indicates that Congress intended for this limitation on copyright to deprive individuals of rights in their unique voices, whether under state right of publicity laws or a new federal statute.[315] To avoid unnecessary confusion or carve outs like the limitations in the New York and Louisiana laws discussed above, the Office recommends that Congress clarify in express terms that section 114(b) does not preempt state laws or affect a new federal right protecting an individual's voice.

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[309] *See* LA. STAT. ANN. § 51:470.2(4) (2024); N.Y. CIV. RIGHTS LAW § 50-f(1)(c) (McKinney 2024) ("A digital replica does not include . . . the making or duplication of another recording that consists entirely of the independent fixation of other sounds, even if such sounds imitate or simulate the voice of the individual.").

[310] 17 U.S.C. § 301(b)(1), (3).

[311] H.R. REP. NO. 94-1476, at 132 (1976).

[312] *See* 17 U.S.C. § 301(b)(1).

[313] *See id.* § 102(a). *Cf.* U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 906.7 (3d Ed. 2021) ("Because human authorship is required for copyright protection, the U.S. Copyright Office will not register naturally occurring objects or materials that are discovered in nature.").

[314] 17 U.S.C. § 102(a).

[315] *See* H.R. REP. NO. 94-1476, at 132 (1976).

III. PROTECTION OF ARTISTIC STYLE

The Office received many comments seeking protection against AI "outputs that imitate the artistic style of a human creator."[316] Commenters voiced concern over 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.[317] They asserted that these outputs can harm, and in some cases have already harmed, the market for that creator's works.[318]

For example, the Center for AI and Digital Policy warned that "if AI can replicate [artists'] signature style en masse, it might undermine the market value of their creations, unjustly depriving them of economic benefits."[319] The Authors Guild described "authors, who, after years of developing their unique voice and style, are finding AI appropriating a part of their personality and mimicries of their work being sold in the market."[320] In addition, commenters argued that, while in the past the impact of human imitators was limited by the demands of time and labor, AI systems present a challenge exponentially greater given their speed and scale.[321] An anonymous artist offered the following example:

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[316] *See, e.g.*, The Authors Guild, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10–12 (Oct. 30, 2023) ("The Authors Guild Initial Comments") ("[W]e will need to find a way to prevent authors' body of work or recognizable style from being exploited by others without permission.").

[317] Some commenters described similar results where an image prompt uses copies of the artist's work. *E.g.*, Katherine Lee et al., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 44–46 n.229 (Oct. 29, 2023) (providing as a hypothetical text-to-image prompt, "a big dog facing left wearing a spacesuit in a bleak lunar landscape with the earth rising in the background as an oil painting in the style of Paul Cezanne high-resolution aesthetic trending on artstation"); *see also id.* at 20 n.66, 46 (describing image-to-image prompts).

[318] *See, e.g.*, *Artificial Intelligence and Intellectual Property: Part II—Identity in the Age of AI: Hearing Before the Subcomm. on Cts., Intell. Prop., & the Internet of the H. Comm. on the Judiciary*, 118th Cong. (2024) (statement of Karla Ortiz, Concept Artist, Illustrator, and Fine Artist) ("Artists and creators who have spent a lifetime honing and refining a skill can now have facsimiles of their hard work reproduced in an instant by a Generative AI model that has been trained on their work . . . .").

[319] Center for AI and Digital Policy, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 15–16 (Oct. 30, 2023).

[320] The Authors Guild, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11 (Oct. 30, 2023) ("The Authors Guild Initial Comments") ("Suddenly, we see people using generative AI to generate texts in the style of authors. . . . [W]e have already seen someone write the last two novels in George R.R. Martin's *A Song of Ice and Fire (Game of Thrones)* series.").

[321] *See, e.g.*, Letter from The Authors Guild, Summary of *Ex Parte* Meeting on May 6, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 2 (May 10, 2024) (noting "that the need for [style] protection has increased in light of the ease with which materials lacking proper attribution can be created and disseminated by AI, as well as the recent explosion of false attribution for AI generated works").

> [A]s of November 29th, 2023, the top result when googling American artist Kelly McKernan is an AI-generated imitation of her style. Not only does this demonstrate the ability of AI forgeries to quickly propagate and pollute search engines and the wider internet but this digital impersonation has a chilling effect on artists' agency and ability to control their online identity. Artists are essentially competing with a distorted version of themselves.[322]

The Office acknowledges the seriousness of these concerns and believes that appropriate remedies should be available for this type of harm.

Copyright law's application in this area is limited, as it does not protect artistic style as a separate element of a work.[323] As noted by several commenters, copyright protection for style would be inconsistent with section 102(b)'s idea/expression dichotomy.[324] Moreover, in most cases the elements of an artist's style cannot easily be delineated and defined separately from a particular underlying work.[325] Google and EFF both stressed that, as a policy matter, stylistic

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[322] Anonymous Artist, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 1 (Dec. 5, 2023).

[323] 17 U.S.C. § 102(b) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery."); *see also Douglas v. Osteen*, 317 F. App'x. 97, 99 (3d Cir. 2009) ("[T]he use of a particular writing style or literary method is not protected by the Copyright Act."); *Whitehead v. CBS/Viacom, Inc.*, 315 F. Supp. 2d 1, 11 (D.D.C. 2004) ("While similar writing styles may contribute to similarity between works' total concept and feel, a particular writing style or method of expression standing alone is not protected by the Copyright Act."); *Tangle Inc. v. Aritzia, Inc.*, No. 23-cv-1196, 2023 U.S. Dist. LEXIS 187348, at *7 (N.D. Cal.) ("Style, no matter how creative, is an idea, and is not protectible by copyright."). *But see* Benjamin L.W. Sobel, *Elements of Style: Copyright, Similarity, and Generative AI*, 38.1 HARV. J.L. & TECH. (forthcoming 2024), https://www.bensobel.org/files/articles/Sobel_Elements-of-Style_Public-Draft-May-18-2024.pdf ("[A]n honest application of copyright law requires us to acknowledge that some of what we call style is copyrightable some of the time, and that in some legal contexts courts regularly protect emergent copyright interests that span multiple works.").

[324] *See, e.g.*, Pamela Samuelson Initial Comments at 36–37 ("[A]ny concept of style that can only be identified by considering several works collectively is far too abstract to merit copyright protection consistent with the idea/expression distinction and Section 102(b). Even if proposed copyright protection for 'style' were focused on stylistic features of individual works, it is difficult to see how copyright protection for style or artistic technique could be reconciled with the idea/expression distinction and Section 102(b)."); MPA Initial Comments at 74 ("However, the law does not grant individuals exclusive rights over artistic style. . . . This conclusion flows ineluctably from one of copyright's most fundamental precepts: that it protects expression, not ideas."). *Cf.* 17 U.S.C. § 102(b) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.").

[325] *See* 2 PATRY ON COPYRIGHT § 4:14 (2024) ("If an . . . artist claimed broad protection for a style not associated with a particular work . . . it would be difficult, if not impossible, to determine the scope of protection.").

aspects of expressive content should remain freely available for later creators to develop and build on.[326]

The Copyright Act may, however, provide a remedy where the output of an "in the style of" request ends up replicating not just the artist's style but protectible elements of a particular work. Additionally, as future Parts of this Report will discuss, there may be situations where the use of an artist's own works to train AI systems to produce material imitating their style can support an infringement claim.

Numerous commenters pointed out that meaningful protections against imitations of style may be found in other legal frameworks,[327] including the Lanham Act's prohibitions on passing off and unfair competition.[328] In its comments, the FTC stated:

> [M]imicking the creator's writing style . . . may also constitute an unfair method of competition or an unfair or deceptive practice, especially when the copyright violation deceives consumers, exploits a creator's reputation or diminishes the value of her existing or future works, reveals private information, or otherwise causes substantial injury to consumers.[329]

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[326] *See* EFF Initial Comments at 7 ("A greater degree of restriction on the public's permissible range of speech, particularly one as elusive as a 'style,' would undermine the cultural advancement at the core of copyright's goals."); Google LLC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 16 (Oct. 30, 2023) ("[A] law protective of artistic style would inevitably inhibit creativity and impoverish the public domain, which is the cultural commons from which all artists can freely take inspiration.").

[327] *See, e.g.*, A2IM-RIAA Joint Initial Comments at 41 ("To the extent that AI systems are based on, or derive their value from, a particular artist's identity, that artist should be protected by laws governing the use of an individual's brand or identity (such as the individual's voice or likeness), including the Lanham Act and laws regarding rights of publicity and unfair competition."); SAG-AFTRA Initial Comments at 8 ("To the extent an AI system is based on, or derives value from, the artist's brand or identity, that artist should have legal recourse. Laws such as the right of publicity or Lanham Act that protect an individual's persona may be implicated, including when an AI program generates output by using the name of a specific artist as a prompt."); Pamela Samuelson Initial Comments at 37 ("The tendency of users of text-to-image generators to invoke the names of living artists in prompts has caused considerable consternation . . . it can occasionally result in the names of particular artists being publicly associated with works they did not author, to an extent that dwarfs their own substantial artistic contributions . . . . This seems like harm that trademark law and right of publicity could address more easily than copyright law.").

[328] *See* Andrew J. Noreuil, *Nice Tie: Trade Dress Protection for Visual Artistic Style When Competitors Offer Artist-Inspired Products*, 67 FORDHAM L. REV. 3403, 3427 (1999) (discussing *Walt Disney Co. v. Goodtimes Home Video Corp.*, 830 F. Supp. 762 (S.D.N.Y. 1993)).

[329] FTC Initial Comments at 5–6. Adobe has proposed that Congress enact legislation, titled the Federal Anti-Impersonation Right (FAIR) Act, which would provide a right of action to artists whose unique personal style or likeness is intentionally imitated using AI tools for commercial gain. Adobe Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 8 (Oct. 30, 2023).

Although state right of publicity statutes do not explicitly refer to style, where a particular style is closely identified with an individual performer, it may be protected.[330] Protection may also be available under the common law.[331] Although the law in this area is not fully developed, that may be because the means of easy and near-perfect stylistic impersonation have not been widely available until recently,[332] and the advent of generative AI may result in an increase in such claims. Meanwhile, some AI developers have reportedly placed guardrails in their systems blocking requests to generate images in the style of living artists.[333]

In sum, there are several sources of protection under existing laws that may be effective against unfair or deceptive copying of artistic style. Given these resources, as well as the policy reasons not to extend property-like rights to style in itself, the Office does not recommend including style as protected subject matter under a federal digital replica law at this time.[334] If existing protections prove inadequate, this conclusion may be revisited.

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[330] *See* 2 J. THOMAS MCCARTHY & ROGER E. SCHECHTER, THE RIGHTS OF PUBLICITY AND PRIVACY §§ 8:110, 4:75 (2d. ed. 2024); *see also Muzikowski v. Paramount Pictures Corp.*, No. 01-cv-6721, 2003 U.S. Dist. LEXIS 21766, at *17–18 (N.D. Ill. Dec. 2, 2003) (holding that the "Illinois Right of Publicity Act defines a person's 'identity' broadly . . . . While the term 'persona' is not contained in the [statute's] list of examples [of attributes that serve to identify an individual], the breadth of the . . . statute supports the conclusion that Illinois courts would use an expansive approach in determining what kinds of attributes are protected under the statute."). *But see Burck v. Mars, Inc.*, 571 F. Supp. 2d 446, 452 (S.D.N.Y. 2008) (holding that the New York right of publicity statute should be "strictly construed and is not to be applied so as to prohibit the portrayal of an individual's personality or style of performance").

[331] The Ninth Circuit has recognized athletic play style as an element of "likeness" under California common law, *Keller v. Elec. Arts, Inc.*, 724 F.3d 1268, 1272 (9th Cir. 2013), and the Northern District of Texas has recognized "performing style" as a protectible aspect of an individual's persona under Texas common law, *Henley v. Dillard Dep't Stores*, 46 F.Supp. 2d 587, 591 (N.D. Tex. 1999) (citing *Elvis Presley Enters. V. Capece*, 950 F.Supp. 783, 801 (S.D. Tex. 1996)).

[332] *See, e.g.*, Authors Guild Initial Comments at 10.

[333] *See Index: Creative Control*, OPENAI, https://openai.com/index/dall-e-3/ ("DALL·E 3 is designed to decline requests that ask for an image in the style of a living artist.") (last visited July 21, 2024); *Frequently Asked Questions*, COPILOT, https://www.bing.com/images/create/help ("We allow living artists, celebrities, and organizations to make requests to limit the creation of images associated with their names and brands.") (last visited July 21, 2024).

[334] In addition to artistic style, some commenters identified other subject matter—specifically name or attribution—they would like to have covered by a digital replica law. They seek to bar the unauthorized use of an individual's name on or in connection with AI-generated material or creative works in general—a different type of harm from the use of realistic image or voice replicas produced by AI, addressed in this Report. The Authors Guild would prohibit unauthorized use of an author's name in connection with AI-generated material. Letter from Authors Guild, Summary of *Ex Parte* Meeting on May 6, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 2 (May 10, 2024). This would prevent unauthorized users from labeling such material with the name of the author the AI system was prompted to imitate. The Directors Guild of America would add moral rights of attribution and integrity, *see supra* note 41, in order to prevent the "harm to a Director's reputation when his/her creative work is altered without their involvement and when their name is falsely attributed to, or deleted from, a creative work." Letter from

IV. CONCLUSION

The Copyright Office agrees with the numerous commenters that have asserted an urgent need for new protection at the federal level. The widespread availability of generative AI tools that make it easy to create digital replicas of individuals' images and voices has highlighted gaps in existing laws and raised concerns about the harms that can be inflicted by unauthorized uses.

We recommend that Congress establish a federal right that protects all individuals during their lifetimes from the knowing distribution of unauthorized digital replicas. The right should be licensable, subject to guardrails, but not assignable, with effective remedies including monetary damages and injunctive relief. Traditional rules of secondary liability should apply, but with an appropriately conditioned safe harbor for OSPs. The law should contain explicit First Amendment accommodations. Finally, in recognition of well-developed state rights of publicity, we recommend against full preemption of state laws.

The Office remains available as a resource to Congress, the courts, and the executive branch in considering the recommendations in this Report and future developments.

Directors Guild, Summary of *Ex Parte* Meetings on May 22 and May 29, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 1–2 (June 4, 2024). In this area, too, it is important to note that several bodies of existing law protect against the unauthorized and confusing use of an individual's name. *See, e.g.*, CAL. CIV. CODE § 3344 (West 2024) (protecting "name, voice, signature, photograph, or likeness"); FLA. STAT. § 540.08 (2024) (protecting "name, portrait, photograph, or other likeness"); VA. CODE ANN. § 8.01-40 (2024) (protecting "name, portrait, or picture"); 15 U.S.C. § 1125 (providing a cause of action for using, among other things, a name in connection with goods and services that is likely to cause confusion).

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Shira Perlmutter
Register of Copyrights and Director
U.S. Copyright Office
July 31, 2024

To Follow

Further Parts of the U.S. Copyright Office's Copyright and Artificial Intelligence Report will be published in 2024. Visit www.copyright.gov/AI for more information and to sign up for updates.

UNITED STATES COPYRIGHT OFFICE

Copyright and Artificial Intelligence

Part 2: Copyrightability

A REPORT OF THE REGISTER OF COPYRIGHTS

JANUARY 2025

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Copyright and Artificial Intelligence

Part 2: Copyrightability

A REPORT OF THE REGISTER OF COPYRIGHTS

JANUARY 2025

ABOUT THIS REPORT

This Report by the U.S. Copyright Office addresses the legal and policy issues related to artificial intelligence ("AI") and copyright, as outlined in the Office's August 2023 Notice of Inquiry ("NOI").

The Report will be published in several Parts, each one addressing a different topic. This Part addresses the copyrightability of works created using generative AI. The first Part, published in 2024, addresses the topic of digital replicas—the use of digital technology to realistically replicate an individual's voice or appearance. A subsequent part will turn to the training of AI models on copyrighted works, licensing considerations, and allocation of any liability. To learn more, visit www.copyright.gov/ai.

ABOUT THE U.S. COPYRIGHT OFFICE

The U.S. Copyright Office is the federal agency charged by statute with the administration of U.S. copyright law. The Register of Copyrights advises Congress, provides information and assistance to courts and executive branch agencies, and conducts studies on national and international issues relating to copyright, other matters arising under Title 17, and related matters. The Copyright Office is housed in the Library of Congress. Its mission is to promote "creativity and free expression by administering the nation's copyright laws and by providing impartial, expert advice on copyright law and policy for the benefit of all." For more information, visit www.copyright.gov.

PREFACE

In early 2023, the U.S. Copyright Office announced a broad initiative to explore the intersection of copyright and artificial intelligence.

In March of that year, the Office released a policy statement with registration guidance for works incorporating AI-generated content. Over the spring and summer, we hosted a series of online listening sessions, presented educational webinars, and engaged with numerous stakeholders to enhance our understanding of the technology and how it is used, the copyright implications, and the potential impact on businesses and individuals.

These activities culminated in an August 2023 Notice of Inquiry, formally seeking public input on the full range of copyright issues that had been raised. In response, we received more than 10,000 comments representing a broad range of perspectives, including from authors and composers, performers and artists, publishers and producers, lawyers and academics, technology companies, libraries, sports leagues, trade groups and public interest organizations, and even a class of middle school students. Comments came from all 50 states and from 67 countries. That valuable and extensive input, supplemented by additional Office research and information received from other agencies, forms the basis for the discussion and recommendations in this Report.

UNITED STATES COPYRIGHT OFFICE

Copyright and Artificial Intelligence
Part 2: Copyrightability

A REPORT OF THE REGISTER OF COPYRIGHTS

JANUARY 2025

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EXECUTIVE SUMMARY

This second Part of the Copyright Office's Report on Copyright and Artificial Intelligence ("AI") addresses the copyrightability of outputs generated by AI systems. It analyzes the type and level of human contribution sufficient to bring these outputs within the scope of copyright protection in the United States.

Of the more than 10,000 comments the Office received in response to its Notice of Inquiry ("NOI"), approximately half addressed copyrightability. The vast majority of commenters agreed that existing law is adequate in this area and that material generated wholly by AI is not copyrightable.

Commenters differed, however, as to protection for generative AI outputs that involve some form of human contribution. They expressed divergent views on what types and amounts of contribution could constitute authorship under existing law. Many also stressed the desirability of greater clarity in this area, including with respect to the use of AI as a tool in the creative process.

As a matter of policy, some argued that extending protection to materials created by generative AI would encourage the creation of more works of authorship, furthering progress in culture and knowledge to the benefit of the public. The Office also heard concerns that an increased proliferation of AI-generated outputs would undermine incentives for humans to create.

While recognizing that copyrightability is determined on a case-by-case basis, in this Part the Office sets out the legal principles that govern the analysis and assesses their application to AI-generated content.

Section I identifies the copyrightability issues raised by AI technologies. It outlines the history of adapting copyright law to new technological developments and describes the Office's ongoing AI initiative.

Section II provides a brief background on the technologies involved. It then summarizes the existing legal framework, particularly the human authorship requirement, the idea/expression dichotomy, and the originality standard for copyright protection. After discussing the use of AI to assist authors in the process of creating works of authorship, it analyzes how the law may apply to various types of human contributions to AI-generated outputs: prompting, the inclusion of human-authored expressive inputs, and the modification or arrangement of AI-generated outputs.

Section III reports on the international landscape. It describes how other countries are approaching questions of copyrightability within their own legal systems.

Section IV addresses the policy implications of providing additional legal protection to AI-generated material and evaluates the arguments for and against legislative change.

Based on an analysis of copyright law and policy, informed by the many thoughtful comments in response to our NOI, the Office makes the following conclusions and recommendations:

- Questions of copyrightability and AI can be resolved pursuant to existing law, without the need for legislative change.
- The use of AI tools to assist rather than stand in for human creativity does not affect the availability of copyright protection for the output.
- Copyright protects the original expression in a work created by a human author, even if the work also includes AI-generated material.
- Copyright does not extend to purely AI-generated material, or material where there is insufficient human control over the expressive elements.
- Whether human contributions to AI-generated outputs are sufficient to constitute authorship must be analyzed on a case-by-case basis.
- Based on the functioning of current generally available technology, prompts do not alone provide sufficient control.
- Human authors are entitled to copyright in their works of authorship that are perceptible in AI-generated outputs, as well as the creative selection, coordination, or arrangement of material in the outputs, or creative modifications of the outputs.
- The case has not been made for additional copyright or *sui generis* protection for AI-generated content.

The Office will continue to monitor technological and legal developments to determine whether any of these conclusions should be revisited. It will also provide ongoing assistance to the public, including through additional registration guidance and an update to the *Compendium of U.S. Copyright Office Practices*.[1]

[1] U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES (3d ed. 2021) ("COMPENDIUM (THIRD)").

I. INTRODUCTION

This Part of the Copyright Office's Report on Copyright and Artificial Intelligence addresses the use of AI systems to produce outputs that would be copyrightable if created by a human author.

The use of technology in the production of works of authorship is not new. Authors have used computer-assisted technology for decades to enhance, modify, and add to their creations—expanding their range of expression and advancing the goals of the copyright system. And today they are leveraging advancements in technology to push the boundaries of creativity in exciting ways. Neither the use of AI as an assistive tool nor the incorporation of AI-generated content into a larger copyrightable work affects the availability of copyright protection for the work as a whole. But the capabilities of the latest generative AI technologies[2] raise challenging questions about the nature and scope of human authorship.

These technologies now permit the creation of textual, visual, and sound outputs that resemble the creative works traditionally protected by copyright. Should these outputs also enjoy copyright protection? The answer will turn on the nature and extent of a human's contribution, and whether it qualifies as authorship of expressive elements contained in the output. Finally, to the extent that protection is not available under existing copyright principles, should the law be changed? If so, how?

A. Technology and Copyright

As stated in the legislative history of the 1976 Copyright Act, "[t]he history of copyright law has been one of gradual expansion in the types of works accorded protection."[3]

Over the years, copyright has proven flexible enough to respond to new technologies and mediums as they emerge. Protection has been extended to photographs, motion pictures, video games, and computer programs—to name just a few.[4] At the same time, courts have been called on to explore and analyze the nature of authorship. As authors have increasingly used

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[2] "Generative AI" refers to "application[s] of AI used to generate outputs in the form of expressive material such as text, images, audio, or video." Artificial Intelligence Study: Notice of Inquiry, 88 Fed. Reg. 59942, 59948–49 (Aug. 30, 2023) ("NOI").

[3] H.R. REP. NO. 94-1496, at 51 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5664.

[4] When Congress extended copyright protection to architecture, it explained that these types of works would be governed by "the general standards of originality applicable for all other copyrightable subject matter." H.R. REP. NO. 101-735, at 21 (1990), *reprinted in* 1990 U.S.C.C.A.N. 6935, 6952. Courts have also applied those standards to claims involving new technology in numerous cases. *See, e.g.*, *Meshwerks, Inc. v. Toyota Motor Sales U.S.A.*, 528 F.3d 1258, 1264–65 (10th Cir. 2008) (then-judge Neil Gorsuch stating "we do not doubt for an instant that the digital medium before us, like photography before it, can be employed to create vivid new expressions fully protectable in copyright"); *Stern Elecs., Inc. v. Kaufman*, 669 F.2d 852, 856–67 (2d Cir. 1982) (audiovisual work); *M. Kramer Mfg. Co. v. Andrews*, 783 F.2d 421, 436 (4th Cir. 1986) (video games); *Tandy Corp. v. Personal Micro Computs., Inc.*, 524 F. Supp. 171, 173 (N.D. Cal. 1981) (computer program and silicon chip).

technology in the process of creation, the relative roles of human and machine can be central to the analysis of copyrightability.

Given its role in registering claims to copyright,[5] the Copyright Office has considerable experience addressing technological developments related to the creation of works of authorship. As early as 1965, developments in computer technology began to raise "difficult questions of authorship," including whether material created using technology is "'written' by computers" or authored by human creators.[6] As then-Register of Copyrights Abraham Kaminstein observed, there is no one-size-fits-all answer:

> The crucial question appears to be whether the "work" is basically one of human authorship, with the computer merely being an assisting instrument, or whether the traditional elements of authorship in the work (literary, artistic, or musical expression or elements of selection, arrangement, etc.) were actually conceived and executed not by man but by a machine.[7]

Because the answer depends on the circumstances of a work's creation, Barbara Ringer (then-Chief of the Examining Division and future Register of Copyrights) noted that the Office could not "take the categorical position that registration will be denied merely because a computer may have been used in some manner in creating the work."[8]

The same analysis applies in the context of AI technology. For a work created using AI, like those created without it, a determination of copyrightability requires fact-specific consideration of the work and the circumstances of its creation. Where AI merely assists an author in the creative process, its use does not change the copyrightability of the output. At the other extreme, if content is entirely generated by AI, it cannot be protected by copyright.[9] Between these boundaries, various forms and combinations of human contributions can be involved in producing AI outputs.

While few bright-line rules are possible in assessing copyrightability, this Part of the Report seeks to shed more light on the relevant considerations.

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[5] The Register of Copyrights is responsible for administering the copyright system, including examining claims for copyright registration. 17 U.S.C. §§ 410(a), 701(a). Although copyright vests automatically in an original work of authorship when fixed in a tangible medium, registration (or its refusal) provides a number of practical and legal benefits, including enabling U.S. copyright owners to enforce their exclusive rights in court. *See generally id.* §§ 106, 408(a), 410(c), 412, 411(a); U.S. Copyright Office, Circular 1: Copyright Basics (Sept. 2021), https://copyright.gov/circs/circ01.pdf.

[6] U.S. COPYRIGHT OFFICE, SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS FOR THE FISCAL YEAR ENDING JUNE 30, 1965, at 5 (1966), https://www.copyright.gov/reports/annual/archive/ar-1965.pdf.

[7] *Id.*

[8] U.S. COPYRIGHT OFFICE, ANNUAL REPORT OF THE Examining Division, Copyright Office, for the Fiscal Year 1965, at 4 (1965), https://copyright.gov/reports/annual/archive/ar-examining1965.pdf.

[9] *See Thaler v. Perlmutter*, 687 F. Supp. 3d 140, 149–50 (D.D.C. 2023).

B. The Copyright Office's AI Initiative

In February 2022, the Copyright Office's Review Board issued a final decision affirming the refusal to register a work claimed to be generated with no human involvement.[10] A year later, the Office issued a registration for a comic book incorporating AI-generated material.[11]

In early 2023, the Office announced the launch of a broad AI Initiative and issued a statement of policy providing guidance on the registration of works incorporating AI-generated material (the "Guidance" or "AI Registration Guidance").[12] The Guidance reiterated the Office's longstanding position that human authorship is an essential requirement for copyright protection in the United States.[13] It explained that 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.[14]

Since the Guidance was issued, the Office has registered hundreds of works that incorporate AI-generated material, with the registration covering the human author's contribution to the work.[15]

In August 2023, the Office issued a Notice of Inquiry seeking comments on a wide range of copyright law and policy issues arising from the development and use of generative AI.[16] The NOI asked five questions related to the copyrightability of material generated using AI systems:

(1) Does the Copyright Clause in the U.S. Constitution permit copyright protection for AI-generated material?

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[10] U.S. Copyright Office Review Board, *Decision Affirming Refusal of Registration of A Recent Entrance to Paradise* (Feb. 14, 2022), https://copyright.gov/rulings-filings/review-board/docs/a-recent-entrance-to-paradise.pdf.

[11] U.S. Copyright Office, *Cancellation Decision re: Zarya of the Dawn* (VAu001480196) at 5 (Feb. 21, 2023), https://www.copyright.gov/docs/zarya-of-the-dawn.pdf (explaining that registration covered the work's human-authored text as well as the human-authored selection, coordination, and arrangement of the work's written and visual elements, but not images generated by Midjourney that were not the product of human authorship).

[12] Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190 (Mar. 16, 2023) ("AI Registration Guidance"). A copy of the guidance is available on the Office's website. U.S. COPYRIGHT OFFICE, COPYRIGHT REGISTRATION GUIDANCE: WORKS CONTAINING MATERIAL GENERATED BY ARTIFICIAL INTELLIGENCE (2023), https://copyright.gov/ai/ai_policy_guidance.pdf.

[13] AI Registration Guidance at 16191–92; *see also Thaler*, 687 F. Supp. 3d at 149–50.

[14] AI Registration Guidance at 16193; *see also* Registration Guidance for Works Containing AI-Generated Content Tr. (June 28, 2023), https://www.copyright.gov/events/ai-application-process/Registration-of-Works-with-AI-Transcript.pdf (webinar on registration of works incorporating AI-generated material).

[15] Registration records are searchable in the Office's public record, including by using keywords and filters to search the Copyright Public Record System. *Copyright Public Records System - Pilot*, U.S. COPYRIGHT OFFICE, https://publicrecords.copyright.gov/ (last visited Jan. 17, 2025).

[16] NOI.

(2) Under copyright law, are there circumstances when a human using a generative AI system should be considered the "author" of the material produced by the system?

(3) Is legal protection for AI-generated material desirable as a policy matter?

(4) If so, should it be a form of copyright or a separate *sui generis* right?

(5) Are any revisions to the Copyright Act necessary to clarify the human authorship requirement?[17]

Approximately fifty percent of the more than 10,000 comments received in response to the NOI addressed one or more of these questions. The Office refers to these comments throughout the discussion below.

[17] *Id.* at 59947–48.

II. AUTHORSHIP AND ARTIFICIAL INTELLIGENCE

A. Technological Background

In the NOI, the Office defined an AI system as a "software product or service that substantially incorporates one or more AI models and is designed for use by an end-user."[18] As components to larger systems, AI models consist of computer code and numerical values (or "weights") designed to accomplish certain tasks, like generating text or images.[19]

Many of today's publicly available AI systems allow for the generation of an output from one or more inputs, such as text, images, audio, video, or a combination of mediums. A "prompt" is a common type of input, often in the form of text, that communicates the desired features of the output.[20] The AI system responds to these inputs by generating an output in the requested format (text, image, audio, video). Prompts typically describe a topic, theme, and/or subject that the user seeks to evoke, and may include the overall style, tone, and/or visual technique. Some are short and simple, such as a request for a "cartoon spaceship." Others are more detailed, requesting a litany of elements. Users may enter a prompt a single time or iteratively, refining it until the system generates an acceptable output.[21]

The practice of crafting prompts that are optimized to elicit a desired result is sometimes called "prompt engineering."[22] Prompts can also be automatically optimized by a generative AI

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[18] NOI at 59948; *see also* James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Pub. L. 117–263, § 7223(4)(A), 136 Stat. 2395, 3669 (2022) (defining "artificial intelligence system" as "any data system, software, application, tool, or utility that operates in whole or in part using dynamic or static machine learning algorithms or other forms of artificial intelligence").

[19] NOI at 59948–49; *see* ZHANG ET AL., DIVE INTO DEEP LEARNING, ch. 1 (2023), https://d2l.ai/chapter_introduction/index.html (ebook); GARETH JAMES ET AL., AN INTRODUCTION TO STATISTICAL LEARNING WITH APPLICATIONS IN PYTHON, at 404–05 (2023), https://www.statlearning.com/ (ebook) (explaining that the parameters of a neural network are sometimes referred to as "weights").

[20] *See, e.g.*, Leonardo Banh & Gero Strobel, *Generative Artificial Intelligence*, 33:63 ELEC. MKTS. 1, 3 (2023), https://doi.org/10.1007/s12525-023-00680-1 ("*Prompting* . . . enables end users using natural language to engage with and instruct [generative AI] application (e.g., LLMs) to create desired output such as text, images, or other types."); *Prompt*, GENLAW GLOSSARY, https://blog.genlaw.org/glossary.html#prompt ("Most generative-AI systems take [an] input (currently, this is often some text), which is then used to condition the output. This input is called the prompt.") (last visited Jan. 17, 2025); *Image Prompts*, MIDJOURNEY, https://docs.midjourney.com/docs/image-prompts ("You can use images as part of a prompt to influence a Job's composition, style, and colors.") (last visited Jan. 17, 2025); Sander Schulhoff et al., *The Prompt Report: A Systematic Survey of Prompting Techniques* at 5, ARXIV (Dec. 30, 2024), https://arxiv.org/abs/2406.06608 ("A prompt is an input to a Generative AI model, that is used to guide its output.").

[21] Other strategies are more complex, such as "prompt chaining" where a complex prompt is divided into a sequence of intermediate subtasks with a prompt for each step. Robert Clariso & Jordi Cabot, *Model-Driven Prompt Engineering*, IEEE *XPLORE*, 2023, at 48, DOI: 10.1109/MODELS58315.2023.00020.

[22] *See, e.g.*, *id.* at 47; Sander Schulhoff et al., *The Prompt Report: A Systematic Survey of Prompting Techniques* at 7, ARXIV (Dec. 30, 2024), https://arxiv.org/abs/2406.06608.

system that revises or expands them in order to improve the quality of outputs.[23] For example, ChatGPT "automatically generate[s] tailored, detailed prompts for [OpenAI's text-to-image model] DALL·E 3."[24]

As described below,[25] however, the output of current generative AI systems may include content that was not specified and exclude content that was. Although AI technology continues to advance, uncertainty around how a particular prompt or other input will influence the output may be inherent in complex AI systems built on models with billions of parameters.[26] Some observers describe AI as a "black box,"[27] and even expert researchers are limited in their ability to understand or predict the behavior of specific models.[28]

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[23] *See, e.g.*, Siddhartha Datta et al., *Prompt Expansion for Adaptive Text-to-Image Generation* at 4, 14, ARXIV (Dec. 27, 2023), https://arxiv.org/abs/2312.16720 (describing a model that "takes a text prompt as input, . . . and outputs a set of *N* expanded text prompts that include specialized keywords (to improve image quality) and interesting additional details (to add diversity to the generated images"); PROMPTPERFECT, https://promptperfect.jina.ai/ (last visited Jan. 17, 2025); PROMPTIST, https://foundr.ai/product/promptist (last visited Jan. 17, 2025).

[24] *DALL·E 3*, OPENAI, https://openai.com/index/dall-e-3/ (last visited Jan. 17, 2025).

[25] *See infra* notes 84–87 and pp. 24–25.

[26] *See, e.g.*, GARETH JAMES ET AL., AN INTRODUCTION TO STATISTICAL LEARNING WITH APPLICATIONS IN PYTHON, at 23–25 (2023), https://www.statlearning.com/ (ebook) (discussing the fundamental tradeoff between the flexibility and interpretability of statistical learning models, with neural networks as an example of highly flexible and difficult to interpret models); Christian Szegedy et al., *Intriguing properties of neural networks* at 1, ARXIV (Feb. 19, 2024), https://arxiv.org/abs/1312.6199 ("Neural networks achieve high performance because they can express arbitrary computation that consists of a modest number of massively parallel nonlinear steps. But as the resulting computation is automatically discovered[,] . . . it can be difficult to interpret and can have counter-intuitive properties."); Pantelis Linardatos et al., *Explainable AI: A Review of Machine Learning Interpretability Methods*, 23 ENTROPY 1, 1 (Dec. 25, 2020), https://dx.doi.org/10.3390/e23010018 (The "increasing complexity combined with the fact that vast amounts of data are used to train and develop such complex systems, while, in most cases, boost[ing] the systems' predictive power, inherently reduc[es] the[] ability to explain their inner workings and mechanisms. As a consequence, the rationale behind their decisions becomes quite hard to understand and, therefore, their predictions hard to interpret.").

[27] Steven Levy, *AI Is a Black Box. Anthropic Figured Out a Way to Look Inside*, WIRED (May 24, 2024), https://www.wired.com/story/anthropic-black-box-ai-research-neurons-features/ ("When I asked the researchers whether they were claiming to have *solved* the black box problem, their response was an instant and unanimous no."); Lou Blouin, *AI's mysterious 'black box' problem, explained*, UMDEARBORN.EDU NEWS (Mar. 6, 2023), https://umdearborn.edu/news/ais-mysterious-black-box-problem-explained. *See also infra* notes 84–87.

[28] *See, e.g.*, Trenton Bricken et al., *Towards Monosemanticity: Decomposing Language Models With Dictionary Learning*, TRANSFORMER CIRCUITS THREAD (Oct. 4, 2023), https://transformer-circuits.pub/2023/monosemantic-features/index.html ("Mechanistic interpretability seeks to understand neural networks by breaking them into components that are more easily understood than the whole. By understanding the function of each component, and how they interact, we hope to be able to reason about the behavior of the entire network."); Adly Templeton et al., *Scaling Monosemanticity: Extracting Interpretable Features from Claude 3 Sonnet*, TRANSFORMER CIRCUITS THREAD (May 21, 2024), https://transformer-circuits.pub/2024/scaling-monosemanticity/index.html ("Our work has many limitations. Some of these are superficial limitations relating to this work being early, but others are deeply fundamental challenges that require novel research to address.").

In addition, many popular AI systems are unpredictable in the sense that their outputs may vary from request to request, even with an identical prompt.[29] Some systems allow users to control this behavior and generate consistent results by setting a "seed" value, which is a number used to initialize the output generation process.[30] For example, Midjourney users can set a seed (*e.g.*, "123") and receive nearly identical images when repeating the same prompt.[31] Even these systems, however, are not always able to guarantee perfect consistency.[32]

B. Legal Framework

As the Office affirmed in the Guidance, copyright protection in the United States requires human authorship. This foundational principle is based on the Copyright Clause in the Constitution and the language of the Copyright Act as interpreted by the courts. The Copyright Clause grants Congress the authority to "secur[e] for limited times to authors . . . the exclusive right to their . . . writings."[33] As the Supreme Court has explained, "the author [of a copyrighted work] is . . . *the person* who translates an idea into a fixed, tangible expression entitled to copyright protection."[34]

No court has recognized copyright in material created by non-humans, and those that have spoken on this issue have rejected the possibility. In two well-known cases, the Ninth

[29] *See, e.g.*, *Reproducible Outputs*, OPENAI, https://platform.openai.com/docs/advanced-usage/reproducible-outputs (last visited Jan. 17, 2025); Shuyin Ouyang et al., *LLM is Like a Box of Chocolates: the Non-determinism of ChatGPT in Code Generation*, ARXIV (Oct. 17, 2024), https://arxiv.org/abs/2308.02828.

[30] *See, e.g.*, *Reproducible Outputs*, OPENAI, https://platform.openai.com/docs/advanced-usage/reproducible-outputs (last visited Jan. 17, 2025); *Seeds*, MIDJOURNEY, https://docs.midjourney.com/docs/seeds ("The Midjourney bot uses a seed number to create a field of visual noise, like television static, as a starting point to generate the initial image grids. Seed numbers are generated randomly for each image but can be specified with the --seed parameter. If you use the same seed number and prompt, you will get similar final images.") (last visited Jan. 17, 2025).

[31] *Seeds*, MIDJOURNEY, https://docs.midjourney.com/docs/seeds (last visited Jan. 17, 2025).

[32] *See* Alexander Schlögl et al., *Causes and Effects of Unanticipated Numerical Deviations in Neural Network Inference Framework*, *in* ADVANCES IN NEURAL INFORMATION PROCESSING SYSTEMS 36 (A. Oh et al. eds., 2023), https://proceedings.neurips.cc/paper_files/paper/2023/hash/af076c3bdbf935b81d808e37c5ede463-Abstract-Conference.html; *Reproducible Outputs*, OPENAI, https://platform.openai.com/docs/advanced-usage/reproducible-outputs (explaining that users can obtain "mostly" deterministic outputs by setting the same seed value) (last visited Jan. 17, 2025); *Seeds*, MIDJOURNEY, https://docs.midjourney.com/docs/seeds ("Identical --seed values [for certain model versions] will produce *nearly* identical images.") (emphasis added) (last visited Jan. 17, 2025).

[33] U.S. Const. art. I, § 8, cl. 8.

[34] *Cmty. for Creative Non-Violence v. Reid* ("*CCNV*"), 490 U.S. 730, 737 (1989) (emphasis added).

Circuit held that text purportedly "authored by non-human spiritual beings"[35] and photographs that a monkey captured with a camera could not be protected by copyright.[36]

In 2023, the U.S. District Court for the District of Columbia became the first court to specifically address the copyrightability of AI-generated outputs.[37] The plaintiff challenged the Office's refusal to register an image that was described in his application as "autonomously created by a computer algorithm running on a machine."[38] Affirming the Office's refusal, the court stated that "copyright law protects only works of human creation," and that "human authorship is a bedrock requirement of copyright."[39] It found that "copyright has never stretched so far [as] . . . to protect works generated by new forms of technology operating absent any guiding human hand."[40] Because, by his own representation, the "plaintiff played no role in using the AI to generate the work," the court held that it did not meet the human authorship requirement.[41] The decision has been appealed.[42]

In most cases, however, humans will be involved in the creation process, and the work will be copyrightable to the extent that their contributions qualify as authorship. It is axiomatic that ideas or facts themselves are not protectible by copyright law,[43] and the Supreme Court has made clear that originality is required, not just time and effort. In *Feist Publications, Inc. v. Rural Telephone Service Co*., the Court rejected the theory that "sweat of the brow" alone could be sufficient for copyright protection.[44] "To be sure," the Court further explained, "the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of

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[35] *Urantia Found. v. Kristen Maaherra*, 114 F.3d 955, 957–59 (9th Cir. 1997) (holding 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"). While the compilation of the book was entitled to copyright, the alleged "divine messages" were not. *Id.*

[36] *Naruto v. Slater*, No. 15-cv-04324, 2016 U.S. Dist. LEXIS 11041, at *10 (N.D. Cal. Jan. 28, 2016) ("[Monkey] is not an 'author' within the meaning of the Copyright Act"), *aff'd*, 888 F.3d 418 (9th Cir. 2018) (finding that monkey cannot sue for copyright infringement).

[37] *Thaler*, 687 F. Supp. 3d 140. A second case challenging the Office's refusal to register an AI-generated output was recently filed. Compl., Allen v. Perlmutter, No. 1:24-cv-2665 (D. Colo. Sept. 26, 2024), Doc. No. 1.

[38] *Thaler*, 687 F. Supp. 3d at 142–43.

[39] *Id.* at 146.

[40] *Id.*

[41] *Id.* at 149–50.

[42] Notice of Appeal, Thaler v. Perlmutter, No. 23-5233 (D.C. Cir. Oct 18, 2023). Oral argument was heard on September 19, 2024.

[43] *See* 17 U.S.C. § 102(b); *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 344-45 (1991) (explaining that "[t]he most fundamental axiom of copyright law is that 'no author may copyright his ideas or the facts he narrates'" (quoting *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 556 (1985))).

[44] 499 U.S. at 352–61.

works make the grade quite easily, as they possess some creative spark, 'no matter how crude, humble or obvious' it might be."[45]

More than a century ago, the Court analyzed the nature of authorship in a case involving the then-new technology of the camera. In *Burrow-Giles Lithographic Co. v. Sarony*, the Court considered a constitutional challenge to Congress's extension of copyright protection to photographs.[46] The defendant argued that photographs were not copyrightable because they lacked human authorship; instead, they were the product of a machine.[47]

The Court began its analysis by defining an "author" as "he to whom anything owes its origin; originator; maker; one who completes a work of science or literature."[48] It described copyright as "the exclusive right of a man to the production of his own genius or intellect."[49] Applying this framework, it identified numerous creative contributions made by the photographer, including "posing the [subject] in front of the camera, selecting and arranging the costume, draperies, and other various accessories," "arranging the subject so as to present graceful outlines," and "evoking the desired expression."[50] In sum, the use of a machine as a tool does not negate copyright protection, but the resulting work is copyrightable only if it contains sufficient human-authored expressive elements.

More recently, in cases involving more than one human contributor, courts have grappled with the nature of the contribution necessary to qualify as authorship. The Supreme Court provided additional guidance in the context of a commissioned sculpture. The parties in *Community for Creative Non-Violence v. Reid* ("*CCNV*") disputed who the author of the sculpture was: the nonprofit organization that conceived of it or the artist asked to make it. The Court concluded that the artist's contributions, which included sketching the design and executing his creative vision in a tangible medium of expression, made him an author.[51] In a remand to the trial court to determine whether the organization could be a joint author of the sculpture, the D.C. Circuit made clear that commissioning the sculpture and providing detailed suggestions and directions were insufficient, as such contributions constitute unprotectible ideas.[52]

The Third Circuit engaged in a similar analysis in *Andrien v. Southern Ocean County Chamber of Commerce*. *Andrien* involved an authorship claim by a plaintiff who had asked a

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[45] *Id.* at 345.

[46] 111 U.S. 53, 55–57 (1884).

[47] *Id.* at 56, 59–60.

[48] *Id.* at 57–58 (internal quotation marks omitted).

[49] *Id.* at 58.

[50] *Id.* at 60 (internal quotation marks omitted).

[51] *CCNV*, 490 U.S. at 751–53.

[52] *Cmty. for Creative Non-Violence v. Reid*, 846 F.2d 1485, 1497 (D.C. Cir. 1988).

printer to rescale and print a collection of maps.[53] The plaintiff had "expressly directed the copy's preparation in specific detail," so that the "compilation needed only simple transcription to achieve final tangible form."[54] Because the printer "did not change the substance of [plaintiff's] original expression," the court held that the plaintiff was the author.[55] Applying *CCNV*, it stated that the author is the "party who actually creates the work, that is, the person who translates an idea into an expression that is embodied in a copy by himself or herself, or who authorizes another to embody the expression in a copy."[56]

Although an AI-generated output cannot be considered a joint work with respect to the user and AI system,[57] joint authorship provides a helpful analogy in assessing whether a party contributed sufficient expression to be considered an author.[58] To be a joint author, one must make a copyrightable contribution.[59] "A person who merely describes to an author what the

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[53] 927 F.2d 132, 133 (3d Cir. 1991) (Under plaintiff's direction, the printer's work "included coordinating the scales, relettering the street names and adding designations for the diving sites as well as for local points of interest.").

[54] *Id.* at 135.

[55] *Id.* at 135–36. *Cf. S.O.S., Inc. v. Payday, Inc.*, 886 F.2d 1081, 1086–87 (9th Cir. 1989) (rejecting an authorship claim from a party who commissioned software noting that "[t]he supplier of an idea is no more an 'author' of a program than is the supplier of the disk on which the program is stored"); *M.G.B. Homes, Inc. v. Ameron Homes Inc.*, 903 F.2d 1486, 1493 (11th Cir. 1990) (providing sketches and ideas did not render client an "author" of the finished expression); *Geshwind v. Garrick*, 734 F. Supp. 644 (S.D.N.Y. 1990) (producer was not the author where he "wanted changes in details and aspects of the [animation clip] and even made suggestions," but did not materially constrain the animator's expression or otherwise influence how the animator executed the instructions), *vacated in part on other grounds*, 738 F. Supp. 792 (S.D.N.Y. 1990), *and aff'd*, 927 F.2d 594 (2d Cir. 1991); *Whelan Assocs. v. Jaslow Dental Lab'y*, 609 F. Supp. 1307, 1318–19 (E.D. Pa. 1985) ("general assistance and contributions to the fund of knowledge" do not make one "a creator of any original work"), *amended*, 609 F. Supp. 1325 (E.D. Pa. 1985), *aff'd*, 797 F.2d 1222 (3d Cir. 1986), *and cert. denied*, 479 U.S. 1031 (1987).

[56] *Andrien*, 927 F.2d at 134–35 ("When one authorizes embodiment, that process must be rote or mechanical transcription that does not require intellectual modification or highly technical enhancement.").

[57] 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." 17 U.S.C. § 101 (defining "joint work"). Because an AI system is not a human being, it cannot be considered an "author" in collaboration with a user. *See* Kernochan Center for Law, Media and the Arts ("Kernochan Center"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6–9 (Oct. 30, 2023) ("Kernochan Center Initial Comments") (noting that machines are not "authors" within the meaning of the Copyright Act, nor are they capable of forming an intention to merge their output with the contributions from the user that interacts with these systems).

[58] *See* The Authors Guild, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 33 (Oct. 30, 2023) ("The Authors Guild Initial Comments") ("Areas of the law that will instruct courts in how to determine what is copyrightable in an AI-assisted human-created work or human-assisted AI-generated material include . . . joint work cases where the issue of whether a secondary creator contributed a sufficient amount to rise to the level of an author . . . .").

[59] *Brownstein v. Lindsay*, 742 F.3d 55, 64 (3d Cir. 2014) ("For two or more people to become co-authors, each author must contribute some non-trivial amount of creative, original, or intellectual expression to the work and both must intend that their contributions be combined."); *Ashton-Tate Corp. v. Ross*, 728 F. Supp. 597 (N.D. Cal. 1989) (finding that a contribution to a joint work must be protectable in itself and that only expressions of ideas, not ideas themselves, give rise to protected interest), *aff'd*, 916 F.2d 516, 521 (9th Cir. 1990).

commissioned work should do or look like is not a joint author for purposes of the Copyright Act."[60]

The following sections apply these legal principles in the context of generative AI systems. After describing uses of computer-assisted tools in the creation process, we discuss the following three kinds of human contribution 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.[61]

C. Assistive Uses of AI Systems

Many commenters expressed concern about continuing the longstanding and growing use of computer-assisted tools in the creation process.[62] They pointed to various tasks that have been performed in creative fields for years, some of which now incorporate recent developments in AI, such as "aging" or "de-aging" actors, identifying chord progressions, detecting errors in software code, and removing unwanted objects or crowds from a scene.[63]

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[60] *Payday*, 886 F.2d at 1087; *see also Sullivan v. Flora, Inc.*, 936 F.3d 562 (7th Cir. 2019) (upholding jury finding that plaintiff and defendant were not joint authors of illustrations because defendant merely offered suggestions on color, style, and text and rough outlines and sketches to guide the plaintiff's work, while the plaintiff used digital design software to create the illustrations, sometime incorporating defendant's suggestions and other times not); *BancTraining Video Sys. v. First American Corp.*, No. 91-cv-5340, 1992 U.S. App. LEXIS 3677, at *12 (6th Cir. 1992) ("Providing sketches, ideas or supervision over copyrightable material is not sufficient to make one a joint author.").

[61] Of course, many cases may involve a combination of two or more of these types of contributions. For example, a user could make creative modifications to an output generated using their own expressive input and multiple prompts.

[62] Commenters from the music industry noted that musicians and sound engineers have used such tools for many years, citing Autotune as one example. Songwriters of North America, et al., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6 (Oct. 30, 2023); *see also* Recording Academy, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 1 (Oct. 30, 2023) ("Recording Academy Initial Comments"). In the software industry, programmers and computer engineers use automated tools to modify software code, such as to perform refactoring and translate from one programming language into another. Apple Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3–4 (Oct. 30, 2023) ("Apple Initial Comments").

[63] For example, commenters reported that musicians are beginning to use AI systems for developing beats or mixing a track. *See* Recording Academy Initial Comments at 3; *see also* Universal Music Group ("UMG"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5–7 (Oct. 30, 2023) ("UMG Initial Comments"); Dina LaPolt, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 7 (Oct. 30, 2023) ("Dina LaPolt Initial Comments"). Motion picture companies use AI tools as part of their creative process, particularly in the context of visual effects and post-production. For example, these tools may be used for color correction, detail sharpening, or de-blurring. Motion Picture Association ("MPA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 37–38 (Oct. 30, 2023) ("MPA Initial Comments"); *see also* Holton Lemaster, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Aug. 31, 2023) ("AI as a support tool for artists who choose to use them in their creation pipeline is fine. Crowd removal from photos, video stabilization tools, and ray tracing are all tools that really shine when enhanced by AI."). AI tools are frequently used in a process called rotoscoping, a time-consuming task that involves "altering individual frames within a single shot to align live-action and computer-generated images." MPA Initial Comments at 6, 37–38.

Commenters argued that these types of uses of AI should not affect the availability of copyright protection for the output.[64]

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. This distinction depends on how the system is being used, not on its inherent characteristics.[65]

Commenters also identified situations where creators have begun to experiment with using AI as a brainstorming tool. The Recording Academy, for instance, stated that "[m]any Academy members already use generative AI as a tool to assist them in creating new music," including through song ideation.[66] Another stakeholder noted that AI can be used to structure or create a preliminary outline for literary works.[67] In these cases, the user appears to be prompting a generative AI system and referencing, but not incorporating, the output in the development of her own work of authorship. Using AI in this way should not affect the copyrightability of the resulting human-authored work.[68]

D. Prompts

1. Commenters' Views

Many of the comments received in response to the NOI focused on the legal implications of creating outputs by providing prompts to an AI system. At the outset, as several

[64] *See, e.g.*, Intellectual Property Owners Association ("IPO"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6–7 (Oct. 30, 2023) ("IPO Initial Comments") ("[I]t is desirable to provide copyright protection for works resulting from a human using an AI system as a tool of creativity and where that human activity satisfies the traditional requirements of human authorship. A lack of this protection would be detrimental to rights holders and creators alike.").

[65] One commenter urged the Office to adopt a distinction based on the type of AI platform a user employs. Scenario, Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6 (Oct. 18, 2023) ("Scenario Initial Comments") (arguing that output generated by a multimodal generative AI platform should presumptively be deemed copyrightable, while output generated by a unimodal generative AI platform should presumptively be deemed uncopyrightable).

[66] Recording Academy Initial Comments at 10.

[67] Literary Works Listening Session Tr. at 31:18–23 (Apr. 19, 2023) (statement by Mary Rasenberger, The Authors Guild).

[68] Other examples of such uses provided by commenters include digital and copy editing and other uses that "are intended to assist, not displace, human creativity." Recording Academy Initial Comments at 3; Lori Wilde, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Oct. 24, 2023); IPO Initial Comments at 2; Authors Alliance, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3 (Oct. 30, 2023) ("Authors Alliance Initial Comments").

commenters noted, prompts themselves, if sufficiently creative, may be copyrightable.[69] The copyright status of the output generated, however, is a separate question.[70]

Most commenters agreed that inputting simple prompts is insufficient to make a user the author of the AI-generated output.[71] Several described prompts as unprotectible ideas or instructions.[72] The American Society of Composers, Authors and Publishers ("ASCAP"), a performing rights organization, asserted that "[w]here a human's involvement is limited to the simple generation of minimal queries and prompts for an AI tool, the resulting material is not entitled to copyright protection."[73] The Brooklyn Law Incubator & Policy Clinic asserted that a simple, general prompt lacks "enough human creativity for the output to qualify for copyright protection."[74] Universal Music Group ("UMG") stated: "The prompting user is no more an

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[69] *See* AI Registration Guidance at 16192 n.27; The Authors Guild Initial Comments at 32 n.39 (arguing that the creator of a prompt "has a copyright in the prompt assuming it has sufficient original expression"); American Association of Independent Music ("A2IM") and the Recording Industry Association of America, Inc. ("RIAA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 34 (Oct. 30, 2023) ("A2IM-RIAA Joint Initial Comments"); Daniel Gervais, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6 (Oct. 30, 2023) ("Daniel Gervais Initial Comments").

[70] *See generally* A2IM-RIAA Joint Initial Comments at 34 ("While the text of those prompts may be independently copyrightable if sufficiently expressive, that does not confer upon the author of the prompt any copyright in the output generated by the AI system."); Johan Brandstedt, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 29 (Oct. 29, 2023) ("Johan Brandstedt Initial Comments").

[71] Commenters used "simple" with varying degrees of specificity, generally referring to prompts that contain only generic descriptions or a short number of words. *See, e.g.*, Donaldson Callif Perez, LLP, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2 (Oct. 30, 2023) ("Donaldson Callif Perez Initial Comments") ("[W]e agree that simple prompts by humans that result in a complex, creative work should not be granted copyright protection."); Dina LaPolt Initial Comments at 7 (stating that "a user inputting a simple generic prompt" should not be able to claim copyright protection); Edward Lee, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11 (Oct. 30, 2023) (stating that "a simple one- or two-word prompt" is unlikely to satisfy the minimum standard for copyright protection in the output); Peer Music and Boomy, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11 (Oct. 30, 2023) ("Peer Music-Boomy Joint Initial Comments") (finding it difficult to imagine how a single prompt that produces a complex output could provide a basis for claiming copyright protection in the output).

[72] *See, e.g.*, Adobe Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5–6 (Oct. 30, 2023) ("Adobe Initial Comments") ("[A] prompt is not copyrightable because the prompt represents the idea."); Johan Brandstedt Initial Comments at 19 (stating that "prompts express *ideas*, image and text generators provide stored *expression*"); European Writers' Council ("EWC"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 16 (Oct. 30, 2023) ("EWC Initial Comments") (stating that "the person formulating the prompts [cannot] claim any rights with respect to the results on the basis of the prompts alone, because the mere formulation of the task and the choice between several results proposed by the AI system is not a creative or protectable act").

[73] ASCAP, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 48–49 (Oct. 30, 2023) ("ASCAP Initial Comments").

[74] Brooklyn Law Incubator & Policy Clinic ("BLIP"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 20 (Oct. 30, 2023) ("BLIP Initial Comments"); *see also* Qualcomm Incorporated, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 7 (Dec. 6, 2023) ("Qualcomm Reply Comments") (stating that output "based on a single, general prompt with *de minimis* creativity" lacks "requisite human expression").

author than someone who tells a musician friend to 'write me a pretty love song in a major key' and then falsely claims co-ownership."[75]

By contrast, other commenters disputed the notion that prompts merely "influence" the AI system and do not provide "specific instructions to create a particular expressive result."[76] For example, the Intellectual Property Owners Association stated that "[i]f a user prompts Midjourney to produce an image or series of images of a city scape under water, the user is going to get a city scape under water."[77]

Commenters' views on more detailed prompts, including those that are revised and repeated, varied. Some viewed highly detailed prompts as sufficient to make some AI-generated outputs copyrightable.[78] Professors Pamela Samuelson, Christopher Jon Sprigman, and Matthew Sag stated that "[s]ophisticated prompts that specify details of an image should be sufficient to meet the [human authorship] requirement," and that "[a] person who instructs a Generative AI with enough detail, such that model output reflects that person's original

[75] Letter from UMG, Summary of *Ex Parte* Meeting on Apr. 22, 2024, Regarding the Office's AI Study, to U.S. Copyright Office 11 (Dec. 3, 2024) (arguing that "users prompting [music generative AI companies] to generate audio files are not composing or writing anything, much less 'their own, original music'" and instead are "simply supply[ing] an uncopyrightable idea in a text prompt . . . and the software itself generates an audio track based on its own predictive algorithms").

[76] IPO Initial Comments at 5; Van Lindberg, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 41 (Oct. 30, 2023) ("Van Lindberg Initial Comments") ("Randomness is part of the generative process—but *the output of an AI model is not random*. A human using the AI system typically describes what should be generated and/or provides other inputs that are used to initialize and guide the generative process."); Ashley Greenwald, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11 (Oct. 30, 2023) (arguing that interior designers initiate generative AI systems by "giv[ing] certain prompts and instructions," refining and modifying interim results, and "mak[ing] the *final determination* whether and how the output co-created with the help of generative AI tools should be utilized"); Christa Laser, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5 (Oct. 30, 2023) ("Christa Laser Initial Comments") ("A few uses of generative AI employ random strings and undirected outcomes, but a more significant role of generative AI is to implement a human's extensive creativity, direction, and selection towards an outcome pre-dreamed in the human mind.").

[77] IPO Initial Comments at 5.

[78] *See* BLIP Initial Comments at 23 (stating that users "may provide very detailed and extensive prompts to an AI-system to ensure that its output is as close as possible to what they anticipated" and such outputs should be copyrightable if "they provided sufficient input and prompts to control the output of an AI system"); Van Lindberg Initial Comments at 42 (stating that "the more information that is given within the prompt, the more control is exerted over the output"); Law Office of Seth Polansky LLC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 26 (Oct. 12, 2023) ("Seth Polansky Initial Comments") ("[A] human who closely guides the output of a generative AI system through curated training or by providing detailed prompts may be able to claim some form of 'joint authorship' with the machine."); Donaldson Callif Perez Initial Comments at 2 ("[I]f someone spends a significant amount of effort creating very specific and detailed prompts to create a complex work, perhaps there should be some copyright protection for that work.").

conception of the work, should be regarded as the author of the resulting work."[79] Another commenter asserted that, with detailed prompts, users "can achieve remarkable control over the expressive elements of the work, such as lighting, pose, style, expressions, and setting."[80]

In contrast, the Authors Guild argued that the unpredictability of the prompt-to-output generation process may make it "difficult to show that there was sufficient control and consequently a sufficient closeness between 'conception and execution.'"[81] Others agreed.[82] Adobe, for instance, stated that "[w]hen you submit a prompt (or idea), you then receive an output based solely on the AI's interpretation of that prompt," and the "AI's expression of [that] idea is not copyrightable."[83]

Several commenters described AI systems as black boxes,[84] meaning that not only do users in most cases not know what "will inform the [AI's] response" to prompts,[85] but that even developers of AI systems cannot generally predict outputs or explain why they include certain

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[79] Pamela Samuelson et al., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3 (Oct. 30, 2023) ("Pamela Samuelson et al. Initial Comments"); *see also* MPA Initial Comments at 47 (predicting that prompts could become "much more detailed" as technology improves to the point where "the inputs themselves may provide the substantive content for the output" and concluding that "[a] rule that prompts would never satisfy the human authorship requirement neglects those likely possibilities").

[80] Christa Laser Initial Comments at 5. Several other commenters cautioned that while there may "be cases where the prompts are so directive and detailed" that the user could be entitled to copyright protection for the output, this is likely to be rare. The Authors Guild Initial Comments at 32; *see also* Daniel Gervais Initial Comments at 6 (describing as "exceptional" cases "in which a detailed prompt . . . could contain expressions of specific ideas that reflect human creative choices directly perceptible in the machine's output").

[81] The Authors Guild Initial Comments at 31.

[82] *See* Association of Medical Illustrators, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 8–9 (Oct. 30, 2023); Kernochan Center Initial Comments at 5–6.

[83] Adobe Initial Comments at 5–6; *see also* Johan Brandstedt Initial Comments at 14, 29; EWC Initial Comments at 16.

[84] *See, e.g.*, Professional Photographers of America, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 7 (Oct. 30, 2023); SeaQVN, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 63 (Sept. 13, 2023); IAC Inc. and Dotdash Media Inc., d/b/a Dotdash Meredith, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3 (Oct. 30, 2023); Eric Bourdages, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 1 (Nov. 26, 2023); James Horvath, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 1 (Sep. 13, 2023); Cooper Reid, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Aug. 31, 2023).

[85] Kernochan Center Initial Comments at 5; *see also* Gabriel Moise, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Aug. 31, 2023); The Authors Guild Initial Comments at 31–32; Vikas Hassija et al., *Interpreting Black-Box Models: A Review on Explainable Artificial Intelligence*, 16 COGNITIVE COMPUTATION 45, 47 (2024), https://link.springer.com/article/10.1007/s12559-023-10179-8 (noting that "the internal workings of [a black-box] model are not easily accessible or interpretable" and that this "lack of transparency" makes it difficult "to understand the model's behavior").

elements and not others.[86] Some provided examples of prompts containing detailed descriptions of what the user had in mind, where the output omitted some elements requested and inserted others.[87]

Commenters also noted that prompts are often entered into an AI system in one medium (such as text) and the output is generated in a different medium (such as a visual image, video, or audio clip). Several commenters asserted that moving from one medium to another requires interpretation, and where AI provides that interpretation, the user's control over the execution of their idea is indirect.[88] UMG highlighted one popular text-to-music generator that cautions users, "[n]o matter how detailed[,] text prompts cannot fully define an actual piece of music."[89]

Some stressed that generative AI systems can produce a seemingly limitless number of variations in response to the same prompt, no matter how many times that prompt is used.[90] The Kernochan Center argued that "[e]xtending the scope of copyright protection in the written prompts to cover the multiplicity of potential outputs" that may be generated by an AI system "comes uncomfortably close to conferring a copyright in a method of generating images (or other works)," which would be prohibited under section 102(b).[91]

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[86] *See* EWC Initial Comments at 9 ("In computer science, PROCESSING (computation) is consistently described as a black box; not even the operators of AI systems know exactly what happens during the learning process—and they do not control it."); *see also supra* Section II.A.

[87] *See* Kernochan Center Initial Comments at 8–9 & n.13 (noting that "even highly elaborated prompts will . . . yield multiple outputs (not all of them fully or accurately responsive to the prompts)" and providing examples). *See also* Tonio Inverness, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5 (Sept. 12, 2023) (demonstrating labor that goes into refining prompts after the results of initial prompt were "not at all what [commenter] had in mind"); UMG Initial Comments at 76–77.

[88] Johan Brandstedt Initial Comments at 14, 19 (stating that "anything started in writing ought not to merit copyright claims over an image"); Kernochan Center Initial Comments at 8 (stating that a textual description "would need to evince an extremely high degree of precision" in order to claim copyright in a pictorial work produced through the use of those instructions); The Authors Guild Initial Comments at 31 n.36 (stating that converting a "text instruction to images created from training data makes the output unpredictable").

[89] Letter from UMG, Summary of *Ex Parte* Meeting on Apr. 22, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 3 (Dec. 3, 2024) (internal citation omitted); *see also How do I make music with Udio?*, UDIO, https://www.udio.com/guide (last visited Jan. 17, 2025) (explaining that prompts cannot fully define an output because "the same text describes an infinite number of possible audio tracks").

[90] *See, e.g.*, Kernochan Center Initial Comments at 8–9; The Authors Guild Initial Comments at 32 n.39.

[91] Kernochan Center Initial Comments at 8–9; *see also* 17 U.S.C. § 102(b) (excluding from copyright protection "any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work").

A few commenters asserted that human-directed revisions to prompts may result in greater control over an output's expressive elements.[92] One technique entails submitting a prompt to the AI system, then revising the prompt, either by adding, removing, or replacing certain terms based on the initial output produced, to generate a new output. The user may revise and repeat upwards of hundreds of times.[93] Eventually the system may generate an output that meets the user's needs; if not, the user may decide to revise the prompt again or abandon the effort. Commenters noted that this process can require a significant amount of time and "demonstrable human effort."[94]

Some commenters advanced a theory of "authorship by adoption" (though few used that phrase).[95] They suggested that a user may exercise creative judgment when deciding to accept the output produced by a generative AI system. One suggested that a user who "repeatedly enters prompts until the output matches their desired expression" is no different than an "artist who continues to dab paint on the canvas until the image matches the painter's vision."[96] In contrast, the Authors Guild likened repetitive prompting to "spinning a roulette

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[92] *See, e.g.*, Evangelical Christian Publishers Association ("ECPA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 8 (Oct. 30, 2023) ("ECPA Initial Comments") ("If the issue is one of control and predictability, fine-tuning repeatedly until the final expression is satisfactory demonstrates the author's ultimate control of the final work, even if each iteration leading up to the final expression may be subject to unpredictability."); SCA Robotics, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2 (Sept. 29, 2023) ("SCA Robotics Initial Comments") (stating that authorship should depend on factors such as "the human user's control of the artistic expression outputted by the platform," including "the extent of the human party's discretion over accepting and/or modifying the outputted work"); International Center for Law & Economics, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 18 (Oct. 30, 2023) ("AI systems remain tools that require human direction and judgment. As such, when a person provides the initial prompt or framing, makes choices regarding the iterative development of the AI output, and decides that the result is satisfactory for inclusion in a final work, they are fundamentally engaging in creative decision making that constitutes authorship under copyright law.").

[93] *See* IPO Initial Comments at 5 (noting that "[t]he same user might iterate on dozens, even hundreds, of prompts of greater complexity and specificity before achieving a desired result").

[94] Superframe, LLC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Sept. 6, 2023); *see also* AI and Metaverse Task Force of the Trust over IP Foundation, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 4 (Oct. 30, 2023); Donaldson Callif Perez Initial Comments at 2.

[95] This theory would find authorship in the decision to adopt something unplanned or unexpected occurring in the course of creating a work. *See* Jane C. Ginsburg & Luke Ali Budiardjo, *Authors and Machines*, 34 BERKELEY TECH. L.J. 343 (2019). It can be traced to *Alfred Bell & Co. v. Catalda Fine Arts*, which assessed the originality of mezzotint engravings that were based on paintings in the public domain. 191 F.2d 99, 104 (2d Cir. 1951). The defendant argued that the engravings were mere copies of preexisting paintings, and therefore not protected by copyright. *Id.* In finding that the engraver's versions were sufficiently different, the court speculated that "[a] copyist's bad eyesight or defective musculature, or a shock caused by a clap of thunder, may yield sufficiently distinguishable variations." *Id.* at 105. "Having hit upon such a variation unintentionally," the court held that "the 'author' may adopt it as his and copyright it." *Id.*

[96] ECPA Initial Comments at 7.

wheel with infinite possibilities."[97] It argued that "when a user [metaphorically] spins the wheel dozens of times until they land on an output they like," such activity should not give the user a right to claim ownership of that output.[98]

Discussing the authorship by adoption theory, Professors Jane Ginsburg and Luke Ali Budiardjo concluded that, "[w]ere post-execution adoption to substitute for any authorial participation, even indirect or inadvertent, in giving physical form to a work, then, in addition to [naming] the 'wrong' author, copyright law would effectively vest adopters with rights in ideas."[99] Professor Daniel Gervais made a similar point with the following analogy: "If I walk into a gallery or shop that specializes in African savanna paintings or pictures because I am looking for a specific idea (say, an elephant at sunset, with trees in the distance), I may find a painting or picture that fits my idea," but "[t]hat in no way makes me an author."[100]

2. Analysis

The Office concludes that, given current generally available technology, prompts alone do not provide sufficient human control to make users of an AI system the authors of the output. Prompts essentially function as instructions that convey unprotectible ideas. While highly detailed prompts could contain the user's desired expressive elements, at present they do not control how the AI system processes them in generating the output.

Cases regarding joint authorship support this conclusion. These cases address the amount of control that is necessary to claim authorship. The provision of detailed directions, without influence over how those directions are executed, is insufficient.[101] As the Third Circuit explained, when a person hires someone to execute their expression, "that process must be rote or mechanical transcription that does not require intellectual modification or highly technical enhancement" for the delegating party to claim copyright authorship in the final work.[102] Although entering prompts into a generative AI system can be seen as similar to providing instructions to an artist commissioned to create a work, there are key differences. In a human-to-human collaboration, the hiring party is able to oversee, direct, and understand the contributions of a commissioned human artist. Depending on the nature of each party's contributions, the artist may be the sole author, or the outcome may be a joint work or work

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[97] The Authors Guild Initial Comments at 31–32.

[98] *Id.*; *see also* Kernochan Center Initial Comments at 9 (asserting that "selection of a single output is not itself a creative act"); Daniel Gervais Initial Comments at 6–7; Johan Brandstedt Initial Comments at 29.

[99] Ginsburg & Budiardjo, *supra* note 95, at 370.

[100] Daniel Gervais Initial Comments at 7.

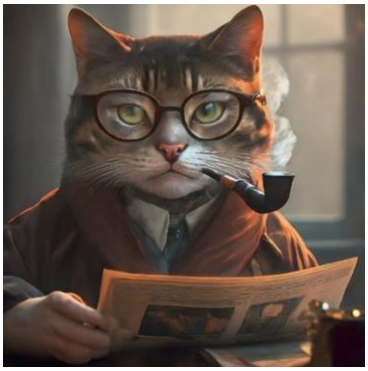
[101] *Payday*, 886 F.2d at 1087; *see, e.g.*, *CCNV*, 490 U.S. at 737 ("As a general rule, the author is the party who actually creates the work, that is, the person who translates an idea into a fixed, tangible expression entitled to copyright protection.").

[102] *Andrien*, 927 F.2d at 134–35.

made for hire.[103] In theory, AI systems could someday allow users to exert so much control over how their expression is reflected in an output that the system's contribution would become rote or mechanical.[104] The evidence as to the operation of today's AI systems indicates that this is not currently the case. Prompts do not appear to adequately determine the expressive elements produced, or control how the system translates them into an output.[105]

The gaps between prompts and resulting outputs demonstrate that the user lacks control over the conversion of their ideas into fixed expression, and the system is largely responsible for determining the expressive elements in the output. In other words, prompts may reflect a user's mental conception or idea, but they do not control the way that idea is expressed. This is even clearer in the case of generative AI systems that modify or rewrite prompts internally. That process recasts the human contribution—however detailed it may be—into a different form.

The following image, which the Office generated by entering a prompt into a popular commercially available AI system, illustrates this point:[106]

Prompt	***Output***
professional photo, bespectacled cat in a robe reading the Sunday newspaper and smoking a pipe, foggy, wet, stormy, 70mm, cinematic, highly detailed wood, cinematic lighting, intricate, sharp focus, medium shot, (centered image composition), (professionally color graded), ((bright soft diffused light)), volumetric fog, hdr 4k, 8k, realistic	

This prompt describes the subject matter of the desired output, the setting for the scene, the style of the image, and placement of the main subject. The resulting image reflects some of these instructions (*e.g.*, a bespectacled cat smoking a pipe), but not others (*e.g.*, a highly detailed wood environment). Where no instructions were provided, the AI system filled in the gaps.

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[103] In contrast, AI systems cannot produce joint works or works made for hire because they are not "authors," they are not capable of forming an intention to merge their output with the user's contributions, and they cannot enter into binding contracts. *See* Kernochan Center Initial Comments at 7; Brief for Appellees, at 27, Thaler v. Perlmutter, No. 23-5233 (D.C. Cir. Mar. 6, 2024).

[104] This outcome would raise additional questions about the utility of AI in creative expression.

[105] *Cf. Geshwind*, 734 F. Supp. at 650–51 ("The fact that the agent, Geshwind, wanted changes in details and aspects of the portrait and even made suggestions, the compliance with which may or may not have improved the effect, does not make him the creator."); *M.G.B. Homes*, 903 F.2d at 1493; *Payday*, 886 F.2d at 1087.

[106] The Office used Google's generative AI chatbot Gemini to generate this image. GEMINI, https://gemini.google.com/ (last visited Jan. 17, 2025).

For instance, the prompt does not specify the cat's breed or coloring, size, pose, any attributes of its facial features or expression, or what clothes, if any, it should wear beneath the robe. Nothing in the prompt indicates that the newspaper should be held by an incongruous human hand.

The fact that identical prompts can generate multiple different outputs further indicates a lack of human control.[107] As one popular system explains on its website, "[n]o matter how detailed . . . the same text describes an infinite number of possible" outputs.[108] In these circumstances, the black box of the AI system is providing varying interpretations of the user's directions.

Repeatedly revising prompts does not change this analysis or provide a sufficient basis for claiming copyright in the output. First, the time, expense, or effort involved in creating a work by revising prompts is irrelevant, as copyright protects original authorship, not hard work or "sweat of the brow."[109] Second, inputting a revised prompt does not appear to be materially different in operation from inputting a single prompt. By revising and submitting prompts multiple times, the user is "re-rolling" the dice, causing the system to generate more outputs from which to select, but not altering the degree of control over the process.[110] No matter how many times a prompt is revised and resubmitted, the final output reflects the user's acceptance of the AI system's interpretation, rather than authorship of the expression it contains.

Some commenters drew analogies to a Jackson Pollock painting or to nature photography taken with a stationary camera, 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 the frame.[111] However, these 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. 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. In the case of a nature photograph, any copyright protection is based primarily on the angle, location, speed, and exposure chosen by the photographer in

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[107] *See supra* note 32. The Office re-ran the prompt above and received a much different image of a cat in a stormy setting.

[108] *How do I make music with Udio?*, UDIO, https://www.udio.com/guide (emphasis omitted) (last visited Jan. 17, 2025).

[109] *Feist*, 499 U.S. at 352.

[110] *See, e.g.*, Kernochan Center Initial Comments at 8 ("If each prompt newly rolls the dice, it is difficult to discern the dominance of will that 'direction' implies, and thus hard to classify it as meeting the requirement of an objective 'intent.'").

[111] *See, e.g.*, Tim Boucher, 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 at 4; MPA Initial Comments at 47–50; Pamela Samuelson et al. Initial Comments at 4.

setting up the camera, and possibly post-production editing of the footage.[112] As one commenter explained, "some element 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."[113] The issue is the degree of human control, rather than the predictability of the outcome.[114]

The Office also agrees that authorship by adoption does not in itself provide a basis for claiming copyright in AI-generated outputs. As commenters noted, providing instructions to a machine and selecting an output does not equate to authorship.[115] Selecting an AI-generated output among uncontrolled options is more analogous to curating a "living garden," than applying splattered paint.[116] As the Kernochan Center observed, "selection among the offered options" produced by such a system cannot be considered copyrightable authorship, because the "selection of a single output is not itself a creative act."[117]

There 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.[118] On the other hand, technological advancements that facilitate increased automation and optimization may bolster our current conclusions. For example, if generative

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[112] Like other copyrighted works, nature photography must have a sufficient amount of creative expression to satisfy the originality standard.

[113] Kernochan Center Initial Comments at 5.

[114] *See* Digital Media Licensing Association ("DMLA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 16 (Oct. 30, 2023) ("DMLA Initial Comments") (stating that "the foreseeability of the AI's results may bear on authorship" in cases "where there is a limited range of specific expressive output that is objectively foreseeable as a result of a human user's prompt"); Kernochan Center Initial Comments at 5; MPA Initial Comments at 45–46 (acknowledging that evaluating "the elements of predictability and control may be appropriate in certain cases"); International Trademark Association ("INTA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5 (Oct. 30, 2023) ("INTA Initial Comments") (acknowledging that if a program generated an image by simply populating "each pixel with a randomly-selected color, it seems obvious that the resulting work should not be considered a work of authorship"); The Authors Guild Initial Comments at 31.

[115] The Authors Guild Initial Comments at 31–32; Daniel Gervais Initial Comments at 6–7; Kernochan Center Initial Comments at 8.

[116] *Kelley v. Chicago Park Dist.*, 635 F.3d 290, 304 (7th Cir. 2011); *see also* COMPENDIUM (THIRD) § 306; *Thaler*, 687 F. Supp. 3d at 146 (holding that the "key" to copyright protection is "[h]uman involvement in, and ultimate creative control over, the work at issue").

[117] Kernochan Center Initial Comments at 9.

[118] S*ee* Authors Alliance Initial Comments at 19 ("[A]s both generative AI systems and the ways that creators use them change and evolve, the application of the human authorship requirement to content that is AI-generated or AI-assisted may also change. For example, if these tools developed in a way that would give creators more control over the outputs, works created with these tools could potentially be considered works of human authorship.").

AI systems integrate or further improve automated prompt optimization, users' control may be diminished.

E. Expressive Inputs

As discussed above, AI systems take inputs in the form of text, images, audio, video, or a combination of these mediums. Some systems—whether via tools, settings, or prompts—allow inputs to be substantially retained as part of the output. For example, one commenter noted that a human author may create an original illustration, input that work into an AI system, and instruct the system "to modify [the] color or layer portions of [the] existing image."[119] Another observed that an AI system may be used to modify or translate a copyrighted work,[120] such as uploading a story written in the first person and instructing the system to convert it to a third-person point of view.

These types of expressive inputs, while they may be seen as a form of prompts, are different from those that merely communicate desired outcomes. As commenters pointed out, where human-authored inputs are reflected in the output, they contribute more than just an intellectual conception. One explained that "a human author who inputs their own illustration or media file" into an AI system "may have a greater claim to authorship," because "there is a limited range of specific expressive output that is objectively foreseeable as a result of a human user's" contribution.[121] Another noted that when a user provides an input to an AI system such as "a traditional work created or designated by the user . . . the specified starting point constrains the 'autonomy' of the outputs" and thus may "present a more persuasive case of human intervention" than simply applying "prompts to an unknown starting point."[122]

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[119] DMLA Initial Comments at 16.

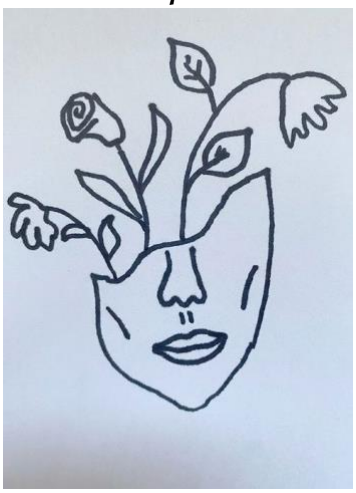
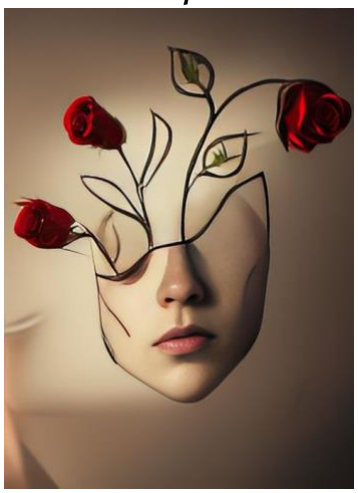
[120] Pearson, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 7 (Oct. 30, 2023) ("Pearson Initial Comments").

[121] DMLA Initial Comments at 16; *see* Pearson Initial Comments at 7–8 (acknowledging that "copyright can only protect material that is the product of human activity" and stating that "further consideration should be given to whether a claim of authorship in output may exist where the input itself is a representation of the original intellectual conception of an author"); National Music Publishers' Association ("NMPA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 30 (Oct. 30, 2023) ("NMPA Initial Comments") ("Creators that use AI to refine, recast, or modify, or to create new derivative works based on their preexisting works may also have legitimate claims of authorship over the resulting work in some circumstances.").

[122] Kernochan Center Initial Comments at 5–6; *see* MPA Initial Comments at 50 (noting that "material human creators provide to the AI tool" such as "inputs, like a drawing or photo" can be considered "intellectual and creative contributions that are inseparable from the ultimate work").

As an example, in the following work submitted to the Office for registration, the author had created a hand-drawn illustration and used it as an input, along with the prompt shown below.[123]

The AI system produced this output:

Prompt	***Input***	***Output***
"a young cyborg woman (((roses))) flowers coming out of her head, photorealism, cinematic lighting, hyper realism, 8k, hyper detailed."		

The drawing itself is a copyrightable work, and its expressive elements are clearly perceptible in the output, including the outline of the mask, the position of the nose, mouth, and cheekbones relative to the shape of the mask, the arrangement of the stems and rosebuds, and the shape and placement of the four leaves.

The applicant disclaimed "any non-human expression" appearing in the final work, such as the realistic, three-dimensional representation of the nose, lips, and rosebuds, as well as the lighting and shadows in the background. After reviewing the information provided in the application, the Office registered the work with an annotation stating: "Registration limited to unaltered human pictorial authorship that is clearly perceptible in the deposit and separable from the non-human expression that is excluded from the claim."[124]

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[123] *Rose Enigma*, VAu001528922 (Mar. 21, 2023). More about the artist Kris Kashtanova's creation of this work is available on their website. *Portfolio: Rose Enigma*, KRIS KASHTANOVA, https://www.kris.art/portfolio-2/rose-enigma (last visited Jan. 17, 2025).

[124] *Rose Enigma*, VAu001528922 (Mar. 21, 2023). By contrast, the Office's Review Board upheld a refusal to register an image produced by an AI system with a human author's photograph as an input. U.S. Copyright Office Review Board, *Decision Affirming Refusal of Registration of Suryast* at 1 (Dec. 11, 2023), https://copyright.gov/rulings-filings/review-board/docs/SURYAST.pdf. The applicant disclosed that the image was generated by "RAGHAV Artificial Intelligence Painting App" ("RAGHAV"), which had been trained on Vincent van Gogh's *The Starry Night*—with an instruction to apply the style of *The Starry Night* to the photograph. *Id*. at 2. The Board found that the resulting image did not "contain sufficient human authorship necessary to sustain a claim to copyright" because the applicant "exerted insufficient creative control over RAGHAV's" generation of the output. *Id*. at 3, 7–8. Unlike *Rose Enigma*, the output did not clearly show the copyrightable work input by the applicant. *See id.* at 7–8.

As illustrated in this example, where a human inputs their own copyrightable work and that work is perceptible in the output, they will be the author of at least that portion of the output. Their own creative expression will be protected by copyright, with a scope analogous to that in a derivative work. Just as derivative work protection is limited to the material added by the later author,[125] copyright in this type of AI-generated output would cover the perceptible human expression. It may also cover the selection, coordination, and arrangement of the human-authored and AI-generated material, even though it would not extend to the AI-generated elements standing alone.

F. Modifying or Arranging AI-Generated Content

Generating content with AI is often an initial or intermediate step, and human authorship may be added in the final product. As explained in the AI Registration Guidance, "a human may select or arrange AI-generated material in a sufficiently creative way that 'the resulting work as a whole constitutes an original work of authorship.'"[126] A human may also "modify material originally generated by AI technology to such a degree that the modifications meet the standard for copyright protection."[127]

As several commenters noted, human authors should be able to claim copyright if they select, coordinate, and arrange AI-generated material in a creative way.[128] This would provide protection for the output as a whole (although not the AI-generated material alone).[129] A relatively common scenario in registration applications is the combination of human-authored text with AI-generated images. In one early case, for instance, the Office found that the selection and arrangement of AI-generated images with human-authored text in a comic book were protectable as a compilation. We explained:

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[125] *See* H.R. REP. NO. 94-1476, at 57; S. REP. NO. 94-473, at 55 ("[C]opyright in a 'new version' covers only the material added by the later author, and has no effect one way or the other on the copyright or public domain status of the preexisting material.").

[126] AI Registration Guidance at 16192.

[127] *Id.* at 16192–93.

[128] *See, e.g.*, BLIP Initial Comments at 20; Center for Art Law, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 9 (Oct. 26, 2023); Cisco Systems, Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 7 (Oct. 30, 2023) ("Cisco Initial Comments"); IPO Initial Comments at 4–6; Peer Music-Boomy Joint Initial Comments at 12.

[129] *See Feist*, 499 U.S. at 348 (noting that copyright protection for a compilation "may extend only to those components of a work that are original to the author").

> [T]he Office finds that the compilation of these images and text throughout the Work contains sufficient creativity under *Feist* to be protected by copyright. Specifically, the Office finds the Work is the product of creative choices with respect to the selection of the images that make up the Work and the placement and arrangement of the images and text on each of the Work's pages. Copyright therefore protects [the applicant's] authorship of the overall selection, coordination, and arrangement of the text and visual elements that make up the Work.[130]

Multiple similar registrations have been made since then.[131]

A number of commenters also made the point that if a user edits, adapts, enhances, or modifies AI-generated output in a way that contributes new authorship, the output would be entitled to protection.[132] They argued that these modifications "should be assessed in the same way as . . . editorial or other changes to a pre-existing work."[133] Although such works would not technically qualify as "derivative works,"[134] derivative authorship provides a helpful analogy in identifying originality. Again, the copyright would extend to the material the human author contributed but would not extend to the underlying AI-generated content itself.[135]

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[130] U.S. Copyright Office, *Cancellation Decision re: Zarya of the Dawn (VAu001480196)* at 5 (Feb. 21, 2023), https://www.copyright.gov/docs/zarya-of-the-dawn.pdf.

[131] *See supra* notes 15, 123.

[132] *See, e.g.*, Apple Initial Comments at 1; ASCAP Initial Comments at 49; The Authors Guild Initial Comments at 32; BLIP Initial Comments at 25; Cisco Initial Comments at 7; Graphic Artists Guild, Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 19 (Oct. 30, 2023) ("Graphic Artists Guild Initial Comments"); OpenAI, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 15 (Oct. 30, 2023).

[133] Kernochan Center Initial Comments at 6.

[134] A derivative work is "a work based upon one or more preexisting works." 17 U.S.C. § 101 (defining "derivative work"). Because entirely AI-generated outputs do not contain the human authorship required to be a "work of authorship," the modified versions cannot qualify under this definition. *See* H.R. REP. NO. 94-1476, at 57; S. REP. NO. 94-473, at 55 (noting that "the 'pre-existing work' must come within the general subject matter of copyright set forth in section 102, regardless of whether it is or was ever copyrighted").

[135] *See* H.R. REP. NO. 94-1476, at 57; S. REP. NO. 94-473, at 55.

Many popular AI platforms offer tools that encourage users to select, edit, and adapt AI-generated content in an iterative fashion. Midjourney, for instance, offers what it calls "Vary Region and Remix Prompting," which allow users to select and regenerate regions of an image with a modified prompt. In the "Getting Started" section of its website, Midjourney provides the following images to demonstrate how these tools work.[136]

(1) Generate Candidate Images with Prompt: *meadow trail lithograph*

(2) Select and Upscale Image

(3) Use Freehand Editing Tool to Select Region

(4) Generate Candidate Images with Prompt*:* *meadow stream lithograph*

(5) Select and Upscale Image

The image was further modified by repeating the editing process:

Other generative AI systems also offer tools that similarly allow users to exert control over the selection, arrangement, and content of the final output.[137]

[136] *Vary Region + Remix*, MIDJOURNEY, https://docs.midjourney.com/docs/vary-region-remix (last visited Jan. 17, 2025). Text descriptions below each image were added by the Office.

[137] OpenAI's ChatGPT, for instance, has a feature called "canvas," which provides an interactive interface for users to "collaborate" with the model while writing a document or code. Users can edit AI-generated text; highlight regions for the model to focus on; use built-in tools to request in-line suggestions, length adjustments, and changes to the reading level; and write instructions that detail particular edits to be made. *See Introducing Canvas*, OPENAI (Oct. 3, 2024), https://openai.com/index/introducing-canvas/.

Unlike prompts alone, these tools can enable the user to control the selection and placement of individual creative elements. Whether such modifications rise to the minimum standard of originality required under *Feist* will depend on a case-by-case determination.[138] In those cases where they do, the output should be copyrightable.

Similarly, the inclusion of elements of AI-generated content in a larger human-authored work does not affect the copyrightability of the larger human-authored work as a whole.[139] For example, a film that includes AI-generated special effects or background artwork is copyrightable, even if the AI effects and artwork separately are not.

[138] The selection, coordination, and arrangement of only two or three elements is not generally sufficient for copyright protection. *See* COMPENDIUM (THIRD) § 312.2 ("[T]he Office generally will not register a compilation containing only two or three elements, because the selection is necessarily *de minimis*." (citing H.R. REP. NO. 94-1476, at 122 (stating that a work does not qualify as a collective work "where relatively few separate elements have been brought together," as in the case of "a composition consisting of words and music, a work published with illustrations or front matter, or three one-act plays"))).

[139] *Cf.* AI Registration Guidance at 16192–93.

III. INTERNATIONAL APPROACHES

Other countries are also analyzing whether copyright protection should extend to works containing AI-generated material. Those that have addressed this issue so far have agreed that copyright requires human authorship.

The Korean Copyright Commission and the Ministry of Culture, Sports and Tourism issued *A Guide on Generative AI and Copyright* in 2023, in which it explained that "only a natural person can become an author"[140] and that "copyright registration for an AI output is impossible if a human did not contribute creatively to the expressive form."[141] The Korean guidance noted that "if a human had performed *additional work* on the AI output, such as modifying, or making additions or deletions, only the part that had undergone such change is copyrightable."[142] It also stated that an author can register a work as a compilation if he or she selected and rearranged the AI output creatively.[143]

In Japan, the Copyright Subdivision of the Cultural Council published a summary of its guidelines in May 2024 titled *General Understanding on AI and Copyright in Japan*.[144] The guidelines explained that the copyrightability of AI-generated content will be determined on a case-by-case basis, depending on the following factors: (1) the amount and content of the instructions and input prompts by the AI user; (2) the number of generation attempts; (3) the selection by the AI user from multiple output materials; and (4) any subsequent human additions and corrections to the AI-generated work.[145]

In the People's Republic of China, the Beijing Internet Court evaluated arguments in a copyright infringement case involving an AI-generated work in 2023, starting with the premise that human authorship was required for copyright protection.[146] It found that an image created

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[140] Ministry of Culture, Sports and Tourism & Korea Copyright Comm'n, *A Guide on Generative AI and Copyright*, at 40 (2023), https://www.copyright.or.kr/eng/doc/etc_pdf/Guide_on_Generative_AI_and_Copyright.pdf.

[141] *Id.* at 41.

[142] *Id.*

[143] *Id.* It has been reported that a copyright registration was granted in December 2023 for an AI-generated film based on the "human editing of the AI[-]generated film and images." Edward Lee, *South Korea grants copyright to AI generated work, 'AI Suro's Wife' film as work edited by humans*, CHATGPT IS EATING THE WORLD (Jan. 8, 2024), https://chatgptiseatingtheworld.com/2024/01/08/south-korea-grants-copyright-to-ai-generated-work-ai-suros-wife-film-as-work-edited-by-humans/.

[144] Legal Subcommittee under the Copyright Subdivision of the Cultural Council, *General Understanding on AI and Copyright in Japan* (May 2024), https://www.bunka.go.jp/english/policy/copyright/pdf/94055801_01.pdf.

[145] *Id.* at 17.

[146] Li Mou Mou Su Liu Mou Mou Qin Hai Zuo Pin Shu Ming Quan, Xin Xi Wang Luo Chuan Bo Quan Jiu Fen An (李某某诉刘某某侵害作品署名权, 信息网络传播权纠纷案) [Li v. Liu, Dispute over Copyright Infringement of the Right of Attribution and Right of Information Network Distribution of Works], at 14 (Beijing Internet Ct. Nov. 27, 2023), https://english.bjinternetcourt.gov.cn/pdf/BeijingInternetCourtCivilJudgment112792023.pdf. Page numbers in this Report are based on the English translation released by the Beijing Internet Court online.

using Stable Diffusion was protected under China's copyright law,[147] and that the person who used AI to create the image was the author.[148] According to the court, the selection of over 150 prompts combined with subsequent adjustments and modifications demonstrated that the image was the result of the author's "intellectual achievements," reflecting his personalized expression.[149]

In the European Union, the majority of member states agreed, in response to a 2024 policy questionnaire on the relationship between generative AI and copyright, that current copyright principles adequately address the copyright eligibility of AI outputs and there is no need to provide new or additional protection.[150] Member states also shared the view that AI-generated content may be eligible for copyright "only if the *human input in* [*the*] *creative process was significant*."[151] This consensus extended to the understanding that purely AI-generated works cannot be protected by copyright, as only a natural person can be considered an author.[152] Based on similar reasoning, in 2024, a court in Czechia, also known as the Czech Republic, held that an AI tool cannot be the author of a copyrighted work.[153]

In the United Kingdom, a statute predating the development of generative AI technologies protects works "generated by computer in circumstances such that there is no human author of the work."[154] It designates the author as a "person by whom the arrangements

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[147] *Id.* at 10–14; *see also* Copyright Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l Cong., Feb. 26th, 2010, effective Apr. 1, 2010), art. 3.

[148] *See supra* note 146 at 14–15. While the ruling is not precedential under Chinese judicial practice, it may inform policies and practices about the copyrightability of AI-generated art under Chinese law. *Id.* at 11–12. China has recently considered statutory clarifications for when a work generated by AI is protected under copyright. A preliminary draft of China's proposed AI law states that when a work generated using AI meets the conditions under the Copyright Law then it can be protected under that law "based on the extent of the user's contribution to the final presentation of the content." Zhong Hua Ren Min Gong He Guo Ren Gong Zhi Neng Fa (Xue Zhe Jian Yi Gao) (中华人民共和国人工智能法 (学者建议稿)) [Law of the People's Republic of China on Artificial Intelligence (Scholar's Draft Proposal)], art. 36, Official WeChat account of the Digi. Rule of Law Inst. at East China Univ. of Political Sci. and L., *translated by* Center for Sec. and Emerging Tech., https://cset.georgetown.edu/wp-content/uploads/t0592_china_ai_law_draft_EN.pdf.

[149] *See supra* note 146 at 11–12.

[150] Council of the European Union, *Policy questionnaire on the relationship between generative Artificial Intelligence and copyright and related rights – Revised Presidency summary of the Member States contributions*, at 16–18 (Dec. 20, 2024), https://data.consilium.europa.eu/doc/document/ST-16710-2024-REV-1/en/pdf.

[151] *Id.* at 16.

[152] *Id.* at 15.

[153] *See* Tomáš Ščerba & Jaroslav Fořt, *The first Czech case on generative AI*, TECH.'S LEGAL EDGE (Apr. 4, 2024), https://www.technologyslegaledge.com/2024/04/the-first-czech-case-on-generative-ai/; Alessandro Cerri, *Czech court finds that AI tool DALL-E cannot be the author of a copyright work*, THE IPKAT (Apr. 15, 2024), https://ipkitten.blogspot.com/2024/04/czech-court-finds-that-ai-tool-dall-e.html.

[154] Copyright, Designs and Patents Act 1988, c. X, I, §§ 178, 9(3) (UK), https://www.legislation.gov.uk/ukpga/1988/48/data.pdf. Protection lasts for fifty years from the date the work is made. *Id.*, c. I, § 12(7).

necessary for the creation of the work are undertaken."[155] In 2021, the United Kingdom Intellectual Property Office ("UKIPO") sought public comment on whether to change this law, in light of advancements in generative AI. Based on the lack of any case law applying this provision to AI,[156] the UKIPO concluded that "[i]t is unclear whether removing [protection for computer-generated works] would either promote or discourage innovation and the use of AI for the public good."[157] It elected to leave the law in place but did not rule out future changes.[158] Since then, the UK government has initiated a new consultation on copyright and AI, including questions about prompts, computer-generated works, and outputs of AI models.[159]

Several other former and current commonwealth countries, such as Hong Kong,[160] India,[161] and New Zealand,[162] have enacted similar provisions, but there too it is unclear whether or how they will apply to AI-generated works.

In Canada, a 2021 review of the Copyright Act acknowledged a lack of clarity concerning the authorship of an AI-generated work.[163] While the Standing Committee on Industry, Science and Technology, which led the review, recommended that legislation should

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[155] *Id.*, c. I, § 9(3).

[156] UKIPO, *Consultation outcome of the Intell. Prop. Office on Artificial Intelligence and Intellectual Property: copyright and patents*, ¶ 22 (June 28, 2022), https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents/outcome/artificial-intelligence-and-intellectual-property-copyright-and-patents-government-response-to-consultation#copyright-in-computer-generated-works.

[157] *Id.* ¶ 29.

[158] *Id.* ¶¶ 29–30.

[159] *See* UKIPO, *Open Consultation of the Intell. Prop. Office on Copyright and Artificial Intelligence* (Dec. 17, 2024), https://www.gov.uk/government/consultations/copyright-and-artificial-intelligence/copyright-and-artificial-intelligence#bcopyright-and-artificial-intelligence.

[160] Section 11(3) of Hong Kong's Copyright Ordinance states: "In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author is taken to be the person by whom the arrangements necessary for the creation of the work are undertaken." Copyright Ordinance, (2019) Cap. 528, § 11(3) (H.K.).

[161] Section 2(d)(vi) of India's Copyright Act defines author as "in relation to any literary, dramatic, musical or artistic work which is computer-generated, the person who causes the work to be created." The Copyright Act, 1957, § 2(d)(vi). Without citing that section, in 2020 the Indian Copyright Office registered the AI-generated work described in note 124, listing the AI tool as a co-author, but a year later issued a notice of withdrawal of the registration. Sukanya Sarkar, *Exclusive: Indian Copyright Office issues withdrawal notice to AI co-author*, MANAGINGIP (Dec. 13, 2021), https://www.managingip.com/article/2a5d0jj2zjo7fajsjwwlc/exclusive-indian-copyright-office-issues-withdrawal-notice-to-ai-co-author.

[162] Section 5(2)(a) of New Zealand's copyright law defines author as "in the case of a literary, dramatic, musical, or artistic work that is computer-generated, the person by whom the arrangements necessary for the creation of the work are undertaken." Copyright Act 1994, s 5(2)(a).

[163] Innovation, Sci. and Econ. Dev. Canada ("ISED Canada"), *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*, at 12 (2021), https://ised-isde.canada.ca/site/strategic-policy-sector/sites/default/files/attachments/2022/ConsultationPaperAIEN.pdf.

provide greater clarity, the Canadian Parliament has not yet acted on the recommendation.[164] In 2023, Canada relaunched the consultation process, with a comment period that closed in January 2024.[165]

Similarly, in Australia, participants in 2024 consultations held by the Select Committee on Adopting Artificial Intelligence shared concerns over the lack of clarity in Australia's copyright laws regarding the "extent of copyright protection, if any, that is afforded to works created by humans with the assistance or augmentation of AI."[166] The Select Committee in its recommendations, however, did not specifically address this issue or suggest any action.

Although some level of consensus on the need for human authorship appears to be emerging, and most countries have so far continued to apply existing law, it is clear that views are still being formed. It remains to be seen how copyrightability standards will be interpreted and applied. The Office is closely monitoring developments abroad and evaluating how other countries' evolving approaches may ultimately overlap or differ from our own.

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[164] *Id.* at 13.

[165] ISED Canada, *Consultation on Copyright in the Age of Generative Artificial Intelligence* (2021), https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/consultation-copyright-age-generative-artificial-intelligence.

[166] Select Committee on Adopting Artificial Intelligence, Parliament of Australia (Final Report, November 2024) ¶ 4.166, https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/RB000470/toc_pdf/SelectCommitteeonAdoptingArtificialIntelligence(AI).pdf.

IV. THE ARGUMENTS FOR LEGAL CHANGE

A. Providing Incentives

Commenters generally stressed the value of incentives to produce new works of authorship.[167] They differed, however, in their interpretations of the Copyright Clause and their assessment of the impact of providing such incentives for AI-generated content.

Those supporting copyright protection for AI-generated material contended that it would encourage the creation of more works, furthering progress in culture and knowledge to the benefit of the public.[168] They took the position that the Copyright Clause should be read flexibly to encompass new technologies.[169] For instance, one commenter argued that this interpretation should "evolve with technological advancements" to ensure that "the spirit of this mandate continues to foster innovation and artistic expression in all its forms."[170]

Most commenters that opined on this issue, however, agreed with the Office's view that the Copyright Clause requires human authorship.[171] They supported the conclusion that AI-

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[167] *See, e.g.*, A2IM-RIAA Joint Initial Comments at 4 n.11 (quoting *Thaler v. Perlmutter*, No. 22-cv-1564, 2023 WL 5333236, at *4 (D.D.C. Aug. 18, 2023)); Copyright Alliance, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5 (Oct. 30, 2023) ("Copyright Alliance Initial Comments"); DMLA Initial Comments at 17–18; Graphic Artists Guild Initial Comments at 1; Internet Archive, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10–11 (Oct. 30, 2023) ("Internet Archive Initial Comments").

[168] *See, e.g.*, Dallas Joder, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3 (Nov. 30, 2023) ("Dallas Joder Reply Comments"); Peer Music-Boomy Joint Initial Comments at 14.

[169] For example, AI company BigBear.ai asserted that the Constitution "does not prohibit protection of AI-generated material," and that the availability of copyright protection "should not depend on the method through which [it] was generated." BigBear.ai Holdings, Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 25 (Oct. 18, 2023); *see also* Ryan Abbott, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6 (Oct. 21, 2023) ("Ryan Abbott Initial Comments") ("The history and purpose of the Constitution and the Copyright Act both weigh in favor of the protection of AI-generated works because the public interest trumps any direct benefit to authors."); Peer Music-Boomy Joint Initial Comments at 15 ("[W]e do not believe that placing limitations on creators by limiting the sort of output we incentivize furthers the constitutional aims of copyright."); BLIP Initial Comments at 25 ("The Copyright Act should be amended to include a new section that provides protection for AI-generated material.").

[170] Dallas Joder Reply Comments at 3; *see also* Duane Valz, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3 (Oct. 18, 2023) (While "the authors of the Constitution may not have imagined that entities other than natural persons would ever qualify as authors or inventors. . . .[, t]his doesn't mean that new types or persons or entities cannot be made eligible as authors or owners of copyrights if Congress sees fit to deem them such.").

[171] *See* A2IM-RIAA Joint Initial Comments at 34–35; The Authors Guild Initial Comments at 34; Anonymous AI Technical Writer, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 15 (Dec. 6, 2023) ("Anonymous AI Technical Writer Reply Comments"); Copyright Alliance Initial Comments at 96–97; DMLA Initial Comments at 17–18; Graphic Artists Guild Initial Comments at 20; David Newhoff, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 3 (Oct. 17, 2023) ("David Newhoff Initial Comments"); UMG Initial Comments at 81–82.

generated material can only be protected where there is sufficient human involvement or where AI is used as a tool to enhance human expression.[172]

These commenters emphasized that the Copyright Clause refers to promoting progress specifically by providing *authors* with legal and economic incentives.[173] They noted that AI systems, by contrast, are inanimate objects that "do not need an incentive to create."[174] As one commenter stated, "AIs do the work they are programmed to do, without regard to incentives."[175]

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[172] *See* American Bar Association, Intellectual Property Law Section ("ABA-IPL"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 14 (Oct. 30, 2023) ("ABA-IPL Initial Comments"); American Intellectual Property Law Association ("AIPLA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11 (Oct. 30, 2023) ("AIPLA Initial Comments"); Johan Brandstedt Initial Comments at 30; ACT | The App Association ("App Association"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6–7 (Oct. 30, 2023) ("App Association Initial Comments"); Entertainment Software Association, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 7 (Oct. 30, 2023); IPO Initial Comments at 7; Recording Academy Initial Comments at 11; Scenario Initial Comments at 16–17.

[173] *See* A2IM-RIAA Joint Initial Comments at 4 (quoting *Thaler v. Perlmutter*, No. 22-cv-1564, 2023 WL 5333236, at *4 (D.D.C. Aug. 18, 2023)), 35; ASCAP Initial Comments at 50; Authors Alliance Initial Comments at 18–19; DMLA Initial Comments at 17–18; Graphic Artists Guild Initial Comments at 1, 20; Daniel Gervais Initial Comments at 7; Fight for the Future, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 8 (Oct. 30, 2023) ("Fight for the Future Initial Comments"); Internet Archive Initial Comments at 10–11; Kernochan Center Initial Comments at 10–11; David Newhoff Initial Comments at 3; NMPA Initial Comments at 29–30; Seth Polansky Initial Comments at 29; Copyright Alliance Initial Comments at 5.

[174] Google LLC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 12 (Oct. 30, 2023); *see also* Computer & Communications Industry Association ("CCIA"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 19 (Oct. 30, 2023) ("CCIA Initial Comments") ("Computers don't need incentives; only people do. And existing incentives—both legal, such as copyrights and patents, and non-legal, such as first-mover advantages and a desire to supply a commercial need—will suffice to ensure the development of generative AI technologies."); AIPLA Initial Comments at 11; NMPA Initial Comments at 29 ("As a policy matter, copyright law should never protect purely AI-generated content that does not represent human expression. Existing copyright law rightfully incentivizes human creativity by granting protection to the 'the fruits of intellectual labor' that 'are founded in the creative powers of the mind.'"); Xiyin Tang et al., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10–11 (Oct. 30, 2023) ("Xiyin Tang et al. Initial Comments") ("The artificial intelligence itself needs no incentive, as it is programmed to create, and needs only human prompting to generate works. The only other party that could need the incentive of copyright would be the users of AI systems. However, creation of works using AI technology requires substantially less time and effort than most human created works. Humans receive copyright protection for their works to balance against the cost of creating those works, and the risk in investing so much time and resources only for another party to copy the finished product. With AI-created works, 'both the fixed and variable costs of producing each copyrightable article are effectively zero, which allows producers to compete with imitators even absent legal protection.'" (citations omitted)).

[175] Pamela Samuelson et al. Initial Comments at 3. *See also* A2IM-RIAA Joint Initial Comments at 4 (quoting *Thaler v. Perlmutter*, No. 22-cv-1564, 2023 WL 5333236, at *4 (D.D.C. Aug. 18, 2023)); Association of American Publishers ("AAP"), Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 31–32 (Oct. 30, 2023) ("AAP Initial Comments"); CCIA Initial Comments at 19; Internet Archive Initial Comments at 10–11 ("The traditional policy foundations for extending copyright protection generally do not apply in the case of AI-generated material. There is no evidence that copyright law provides necessary incentives for the creation of AI-generated works, and regardless,

Several commenters asserted that there appear to be sufficient incentives for AI companies under existing law.[176] Some pointed out that the exponential growth of AI technologies—even in the absence of copyright protection—indicates that their developers do not need copyright incentives to produce these technologies.[177] "As machine learning practitioners," the AI company Hugging Face, stated: "[W]e find that very little to no innovation in generative AI is driven by the hope of obtaining copyright protection for model outputs. The incentives for innovation already exist without modifying copyright law."[178]

Finally, many expressed concern that providing legal protection to AI-generated content would discourage human authorship. Representatives of copyright owners maintained that the proliferation of legally protected AI-generated outputs would stifle creativity, leading to an overall decrease in human-authored works available to the public because humans will be disincentivized to create.[179] For example, the Copyright Alliance predicted that "[i]f . . .

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the constitutional foundations of copyright make clear that its goal is to incentivize human authorship."). *But see* Dallas Joder Reply Comments at 4 (predicting that self-aware AI might someday "rationally respond to [intellectual property ("IP")] incentives just like humans," such that they should be "permitted to keep and profit from the fruits of their creativity").

[176] A2IM-RIAA Joint Initial Comments at 35; AAP Initial Comments at 31–32; AIPLA Initial Comments at 11 ("At this time, it does not appear that legal protection for AI-generated outputs is critical to incentivizing the creation of AI technologies and systems; and the copyrightability of the AI system itself is sufficient."); CCIA Initial Comments at 19; Copyright Alliance Initial Comments at 95–96. Commenters identified several incentives, separate from any potential legal protection in AI-generated outputs, that encourage the development of AI technologies. *See, e.g.*, R Street Institute, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10 (Oct. 30, 2023) ("R Street Initial Comments") ("Existing copyright protection for computer code does offer some incentives for the development of generative AI technologies."); Xiyin Tang et al. Initial Comments at 10–11 ("There are already incentives for the creation and development of AI technology through patent and copyright protection in the machinery and software, so the developers of AI have been sufficiently incentivized to create and improve their programs."); CCIA Initial Comments at 19 (discussing perceived commercial need and first-mover advantage); Anonymous AI Technical Writer Reply Comments at 15 (discussing the availability of venture capital and stock-market funding for AI development); DMLA Initial Comments at 17 (discussing patents and trade secrets); UMG Initial Comments at 81 (discussing AI as a tool or service).

[177] AIPLA Initial Comments at 11 (noting that AI systems were "generated and commercialized in the absence of any clear authority providing legal protection to the outputs, and the absence of such protections does not appear to have diminished the public's interest in consuming AI, nor service-providers' interest in providing it"); The Authors Guild Initial Comments at 33; Copyright Alliance Initial Comments at 95–96; Graphic Artists Guild Initial Comments at 19–20.

[178] Hugging Face, Inc., Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 13 (Oct. 30, 2023).

[179] Take Creative Control, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2 (Oct. 18, 2023); Software Freedom Conservancy, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2 (Dec. 6, 2023); Timothy Allen, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry (Sept. 6, 2023) ("Not only does it prevent people from being able to claim any kind of ownership to their designs, it also creates a great degree of consumer confusion as to which pieces are real and which are not, and could have a chilling effect on further creative fields (many of which are already deeply suffering economically)[.]"); Anonymous Artist, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 1, 10 (Dec. 5, 2023); Letter from UMG, Summary of *Ex Parte* Meeting on Apr. 22, 2024 Regarding the Office's AI Study, to U.S. Copyright Office 6, 14 (Dec. 3, 2024).

policymakers give incentives to generate AI content, the sheer volume and speed with which AI material is generated could obliterate the markets for much human creation."[180] It further asserted that "[o]ur popular culture will be overtaken by low quality, AI-generated works because the cost of human creation would be deemed too burdensome in comparison to using AI."[181] The Authors Guild cautioned that if "AI-generated works were entitled to the same protection as human-created works," the producers of this material would have an "unfair leverage in the marketplace" which "would further incentivize the distribution of AI-generated content to the public, crowding and diluting the marketplace to the point that copyright incentives no longer function as intended."[182] It expressed particular concern that "[t]he creative middle class professions . . . will be drowned out and decimated," and that "our literary works and arts will suffer tremendously as a result."[183]

Some commenters sought to achieve the perceived value of incentives outside of the copyright system, proposing that AI-generated works could be protected instead through the establishment of new *sui generis* rights. They suggested that a "specialized right could be tailored to address the unique aspects of AI creations, including the balance between human input and AI processing," the term of protection, and the identity of rightsholders, among others.[184]

Of the commenters who addressed *sui generis* rights specifically, most opposed the idea. They saw *sui generis* rights as raising similar concerns about incentives and the impact on

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[180] Copyright Alliance Initial Comments at 95; *see also* David Newhoff Initial Comments at 2–3 (explaining that vesting copyrights in corporate production of AI-generated material "pos[es] a threat to the careers of creative professionals" and that "[b]eyond posing a threat to the careers of creative professionals (and to the cultural value of creative work), at a certain point, the application of copyright law itself may become irrelevant and/or unconstitutional"); The Authors Guild Initial Comments at 34 ("Few human creators will be able to earn enough to sustain a profession and the human quality of work produced by professionals . . . will disappear."); Fight for the Future Initial Comments at 6. *But see* Donaldson Callif Perez Initial Comments at 2 ("Critics of artificial intelligence worry that the technology will eradicate jobs and be used to replace artists at the expense of human stories. Its proponents say that it is the way of the future and should be treated like just another tool in an artist's toolbox. The truth likely lies somewhere in the middle."); UMG, Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 11 (Dec. 6, 2023); A2IM-RIAA Joint Initial Comments at 35.

[181] Copyright Alliance Initial Comments at 95.

[182] The Authors Guild Initial Comments at 34.

[183] *Id.*

[184] ImageRights International, Inc. ("ImageRights"), Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 9 (Dec. 6, 2023) ("ImageRights Reply Comments"); *see also* Seth Polansky Initial Comments at 29 (suggesting shorter term for AI-generated material and clearer definition of who owns rights in outputs); Public Knowledge, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 19 (Oct. 30, 2023) (arguing that benefits of a *sui generis* right "may include faster and cheaper registration, and a lowered standard of documentation to illustrate which parts are attributable to AI, and (potentially) provenance of the work's AI components"); Rightsify Group LLC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10 (Oct. 30, 2023). A few advocated for *sui generis* protection specifically for AI model weights. *See* BLIP Initial Comments at 25–26; Van Lindberg Initial Comments at 5.

human authors.[185] Some also characterized past experience with *sui generis* regimes as problematic in various respects.[186]

In the Office's view, the case has not been made for additional protection for AI-generated material beyond that provided by existing law. As an initial matter, because copyright requires human authorship, copyright law cannot be the basis of protection for works that do not satisfy that requirement. As most commenters recognized, the incentives authorized by the Copyright Clause are to be provided to human authors as the means to promote progress. While Congress could instead consider establishing *sui generis* rights,[187] we do not find the policy arguments for additional protection to be persuasive.

To begin with, it is not clear that new incentives are needed. The developers of AI models and systems already enjoy meaningful incentives under existing law (as indicated by the rapid development and adoption of those models and systems). These incentives include patent, copyright, and trade-secret protection for the machinery and software, as well as potential funding and first-mover advantages. Moreover, we are not convinced that providing further incentives would promote progress. We share the concerns expressed about the impact of AI-generated material on human authors and the value that their creative expression provides to society. If a flood of easily and rapidly AI-generated content drowns out human-authored works in the marketplace, additional legal protection would undermine rather than advance the goals of the copyright system. The availability of vastly more works to choose from could actually make it harder to find inspiring or enlightening content. Indeed, AI

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[185] *See, e.g.*, The Authors Guild Initial Comments at 33 (arguing that *sui generis* rights "will dilute the market for human-created works and . . . does not serve the goals of copyright or the needs of society"); EWC Initial Comments at 17; AAP Initial Comments at 31–32; ABA-IPL Initial Comments at 13–14; ASCAP Initial Comments at 49; Authors Alliance Initial Comments at 18–19; Kernochan Center Initial Comments at 10; NMPA Initial Comments at 29; App Association Initial Comments at 7; Pamela Samuelson et al. Initial Comments at 4; AIPLA Initial Comments at 11; R Street Initial Comments at 10.

[186] Consumer Technology Association, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 6 (Oct. 30, 2023) ("The history of *sui generis* approaches has been that as technology advances, they either quickly become obsolete (e.g., Semiconductor Chip Protection Act of 1984), or may raise uncertainties and impediments pertaining to copyright.").

[187] *See, e.g.*, the Semiconductor Chip Protection Act of 1984, establishing *sui generis* rights in mask works. H.R. REP. NO. 98-781, at 7–8 (1984), *reprinted in* 1984 U.S.C.C.A.N. 5750, 5756–57; Trademark Clarification Act of 1984, Pub. L. No. 98-620, § 301, 98 Stat. 3335, 3347 (1984); 17 U.S.C. §§ 901–14. *See also* the Vessel Hull Design Protection Act, establishing *sui generis* protection for original designs of vessel hulls. Digital Millenium Copyright Act, Pub. L. No. 105-304, Title V, § 502, 112 Stat. 2860, 2905 (1998), *amended by* the IP and Communications Omnibus Act of 1999, Pub. L. No. 106-113, § 5005, 113 Stat. 1536, 1501A–593 (1999); 17 U.S.C. §§ 1301–32. These rights differ from copyright in terms of eligibility, ownership rights, registration procedures, term, and remedies. It is difficult, however, to extrapolate from these examples, since experience with their use is limited and the context of today's widely used AI technologies is quite different.

training itself is reportedly reliant on human-generated content, with synthetic data leading to lower-quality results.[188]

There are already indications that AI-generated content has impacted some creators' ability to be compensated for their work.[189] Musicians and songwriters, for instance, have been impacted by the proliferation of AI-generated content on streaming services. UMG reported that "content oversupply," produced by an estimated 170 million AI-generated music tracks, currently threatens to dilute human creators' royalties.[190] AI-generated works have also threatened to reduce the pool of royalties available to human creators through the Mechanical Licensing Collective.[191]

If authors cannot make a living from their craft, they are likely to produce fewer works. And in our view, society would be poorer if the sparks of human creativity become fewer or dimmer.

B. Empowering Creators with Disabilities

A number of commenters asserted that extending protection to AI-generated works would empower more individuals with physical and cognitive disabilities to create.[192] The

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[188] Kristian Hammond et al., *Degenerative AI: The Risks of Training Systems on their own Data*, NORTHWESTERN UNIV. CENTER FOR ADVANCING SAFETY OF MACHINE INTELL. (Sept. 6, 2024), https://casmi.northwestern.edu/news/articles/2024/degenerative-ai-the-risks-of-training-systems-on-their-own-data.html; Aatish Bhatia, *When A.I.'s Output Is a Threat to A.I. Itself*, N.Y. TIMES (Aug. 25, 2024), https://www.nytimes.com/interactive/2024/08/26/upshot/ai-synthetic-data.html.

[189] Researchers are beginning to seek to quantify the impacts of AI on artists' livelihoods. *See, e.g.*, International Confederation of Societies of Authors and Composers ("CISAC"), STUDY ON THE ECONOMIC IMPACT OF GENERATIVE AI IN THE MUSIC AND AUDIOVISUAL INDUSTRIES (Nov. 2024), https://www.cisac.org/services/reports-and-research/cisacpmp-strategy-ai-study; Gaétan de Rassenfosse et al., *Intellectual Property and Creative Machines*, NAT'L BUREAU OF ECON. RSCH. WORKING PAPERS, July 2024, Working Paper No. 32698, https://www.nber.org/papers/w32698.

[190] UMG Initial Comments at 13.

[191] Under a blanket license established in Section 115 of the Copyright Act, royalties for digital phonorecord deliveries of nondramatic musical works are paid into a pool for the mechanical licensing collective to divide and distribute to copyright owners. Although the Office has clarified that musical works that lack human authorship are not eligible for the blanket license, parties have attempted to obtain royalties for streams of AI-generated content. Letter from Suzanne V. Wilson, Gen. Couns. and Assoc. Register of Copyrights, U.S. Copyright Office, to Kris Ahrend, Chief Exec. Officer, The Mechanical Licensing Collective (Apr. 20, 2023), https://copyright.gov/ai/USCO-Guidance-Letter-to-The-MLC-Letter-on-AI-Created-Works.pdf. Such conduct has even been the basis of a criminal indictment for fraud. Press Release, U.S. Attorney's Office, Southern District of New York, North Carolina Musician Charged with Music Streaming Fraud Aided by Artificial Intelligence (Sept. 4, 2024), https://www.justice.gov/usao-sdny/pr/north-carolina-musician-charged-music-streaming-fraud-aided-artificial-intelligence.

[192] *See, e.g.*, BLIP Initial Comments at 24; ECPA Initial Comments at 8; Tom Yonge, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 33–36 (Sept. 18, 2023). Some commenters illustrated how generative AI has helped them create despite their disabilities. *See* Elisa Rae Shupe, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry Initial Comments at 1 (Oct. 27, 2023); Michael Summey, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 1 (Oct. 30, 2023).

specific applications they identified, however, involve the use of AI as a tool to assist in creating works, rather than to generate output without human authorship. The Brooklyn Law Incubator & Policy Clinic, for instance, cited functionalities like text-to-speech, visual art generative algorithms, and improving the written communication of those with cognitive disabilities.[193] Discussing creators with disabilities, another noted that "AI acts as a tool in the hands of an author," rather than a source of expressive content.[194]

The Office strongly supports the empowerment of all creators, including those with disabilities. We stress that to the extent these functionalities are used as tools to recast, transform, or adapt an author's expression, copyright protection would be available for the resulting work.[195] For example, the Office recently considered an application to register a sound recording by GRAMMY-winning country artist Randy Travis, who has limited speech function following a stroke.[196] The track was created based on the recording of a human voice, using "[a] special-purpose AI vocal model . . . as a tool . . . to help realize the sounds that Mr. Travis and the other members of the human creative team desired."[197] The result, which would have been infeasible without this technology, was a new track appearing to be sung in Travis's legendary voice. Because the sound recording used AI as a tool, not to generate expression, the Office registered the work.

The distinction between assistive uses and generative ones applies equally to creators with disabilities and other human authors. Copyright protection remains available where AI functions as an assistive tool that allows human authors to express their creativity.

C. Countering International Competition

A few commenters raised concerns about international competition. One organization warned that without copyright protection in the United States, "the scientific and creative communities will not be able to exploit the economic value of [AI-generated works]," which "may contribute to the U.S. lagging in the development of generative AI technologies and

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[193] BLIP Initial Comments at 24.

[194] *See* ECPA Initial Comments at 8 (discussing artists who are not able to hold a paintbrush and stating that creators with disabilities are "wielding [AI] to create intended expression").

[195] Registration Guidance for Works Containing AI-Generated Content Tr. at 4–5 (June 28, 2023), https://www.copyright.gov/events/ai-application-process/Registration-of-Works-with-AI-Transcript.pdf.

[196] *Where That Came From*, SR0001018989 (May 29, 2024).

[197] Letter from Steven Englund to U.S. Copyright Office (Oct. 28, 2024). In correspondence with the Office, the applicant further explained that the model "was developed specifically for th[e] project under Mr. Travis'[s] supervision using a curated set of vocal tracks from prior recordings by Mr. Travis" and that "the creative team [used the tool] to translate a sonically-tailored recording of James Dupré singing the composition 'Where That Came From' into a vocal track in Mr. Travis'[s] distinctive voice, while preserving the original cadence, phrasing, articulation, dynamics and other musical characteristics of Mr. Dupré's human performance." *Id.*

systems."[198] Another commenter similarly stated that if the U.S. does not adopt copyright protection for AI-generated outputs, "the global locus of cultural [intellectual property] generation will . . . shift to other nations with more AI-friendly policy environments."[199] This commenter further argued that excluding AI-generated works from copyright protection would not actually serve artists' interests,[200] as American artists instead "will be swept away by a public domain flood of [low-cost] foreign AI content" with which they cannot compete.[201]

Regardless of what other countries conclude, however, the United States is bound by our own Constitution and copyright principles. We should not abandon or distort those principles simply because other countries may not share them. Rather, we should make a persuasive case that a human-centered approach is good policy and inherent to copyright.

In any event, as described above, it remains to be seen how other jurisdictions' copyright laws will address generative AI. Commenters' concerns assume a substantial disparity in legal protection for AI-generated material, but no such disparity has yet clearly emerged. As a group of law professors acknowledged, while generative AI is likely to have widespread impact on human creativity, its effects on employment are difficult to predict.[202]

D. Providing Greater Clarity

Some commenters stressed the benefits of clarity and certainty. They posited that creators would be better off with certainty that their works produced using AI would be protected and available to license or sell. One commenter said that otherwise, the "commercial viability of the works made using AI tools is undermined [and] . . . [t]he adoption of these tools will also be impacted."[203] Some cautioned that, absent greater clarity, authors may question whether they own what they create using AI, whether they can license their content to other parties, whether they can register their works with the Office, and

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[198] The Knot Worldwide Inc. ("TKWW"), Reply Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 2 (Dec. 6, 2023) ("TKWW Reply Comments").

[199] Dallas Joder Reply Comments at 2.

[200] *See id.*

[201] *Id.* This commenter further cautioned that American AI startups will expend more financial resources on IP litigation than competitors in other countries that offer more expansive legal protection but did not explain how the volume of litigation would hinge on the copyrightability of AI-generated works. *See id.*

[202] *See* Pamela Samuelson et al. Initial Comments at 5.

[203] Microsoft and Github, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10 (Oct. 30, 2023); *see also* IPO Initial Comments at 6–7 ("[I]f works created by humans using AI tools are not protected, that creates uncertainty for companies. Uncertainty leads to difficulty planning, developing, and investing, which could undermine the encouragement and promotion of arts and sciences."); ABA-IPL Initial Comments at 13–14; App Association Initial Comments at 6; ECPA Initial Comments at 7–8; Van Lindberg Initial Comments at 46; MPA Initial Comments at 59; TKWW Reply Comments at 2; SCA Robotics Initial Comments at 1.

whether their registration certificates will be entitled to a presumption of validity in an infringement action.[204]

A number of commenters urged the enactment of legislation to articulate the scope of protection through guidelines or standards.[205] One suggested establishing a legal presumption that an AI system's owner is the author of any output that the system may generate.[206] Another contended that the law should clarify that an "insignificant use of an AI tool that is otherwise substantially created by a human" does not make that work ineligible for copyright protection.[207]

The Office understands the desire for clarity around the copyrightability of AI-generated material. We do not believe, however, that legislation is necessary at this point. Much of the concern expressed focused on the assistive use of AI tools, and this Report seeks to provide assurances that such uses do not undermine protection. As to determining the copyrightability of AI outputs, the courts will provide further guidance on the human authorship requirement as it applies to specific uses of AI (including in reviewing the Office's registration decisions). Meanwhile, the analysis in this Part of the Report can help to shed light on how existing principles and policies apply.

Even if Congress were to consider addressing this issue through legislation, greater clarity would be difficult to achieve. Because the copyrightability inquiry requires analysis of each work and the context of its creation, statutory language would be limited in its ability to provide brighter lines. Unless and until future developments raise new problems, the Office does not recommend a change in the law.

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[204] *See* Sandra Aistars, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 10–11 (Oct. 30, 2023); Graphic Artists Guild Initial Comments at 2–3; Qualcomm Reply Comments at 6.

[205] BLIP Initial Comments at 22; CISAC, Comments Submitted in Response to U.S. Copyright Office's Aug. 30, 2023, Notice of Inquiry at 5–6 (Oct. 30, 2023); ImageRights Reply Comments at 8–9; INTA Initial Comments at 4–5; Seth Polansky Initial Comments at 27–28.

[206] Ryan Abbott Initial Comments at 18.

[207] ASCAP Initial Comments at 49.

V. CONCLUSION

Based on the fundamental principles of copyright, the current state of fast-evolving technology, and the information received in response to the NOI, the Copyright Office concludes that existing legal doctrines are adequate and appropriate to resolve questions of copyrightability. Copyright law has long adapted to new technology and can enable case-by-case determinations as to whether AI-generated outputs reflect sufficient human contribution to warrant copyright protection. As described above, in many circumstances these outputs will be copyrightable in whole or in part—where AI is used as a tool, and where a human has been able to determine the expressive elements they contain. Prompts alone, however, at this stage are unlikely to satisfy those requirements. The Office continues to monitor technological and legal developments to evaluate any need for a different approach.

The Office will provide ongoing assistance to the public on the copyrightability issues related to generative AI, including by issuing additional registration guidance and updating the relevant sections of the *Compendium of U.S. Copyright Office Practices*. In doing so, we will rely on the comments received in response to the NOI, judicial developments, and other relevant input.

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The U.S. Copyright Office's Copyright and Artificial Intelligence Report and additional information about the Office's AI initiative are available on the Copyright Office's website. Visit www.copyright.gov/AI for more information and to sign up for updates.