"It's Like I've Got This Music in My Mind":[1] Protecting Human Authorship in the Age of Generative Artificial Intelligence

JUSTINE MAGOWAN†

The music industry stands on the brink of a crisis. With unpredictable judicial standards that are inconsistent across the country, plaintiffs seeking to protect their musical works against copyright infringement face a heavy burden of proof, especially when facing defendants who are more well-known and more well-funded. Not only that, but plaintiffs may not receive their day in court given that powerhouse artists like Taylor Swift, Sam Smith, and Bruno Mars have chosen to settle rather than defend their musical works in court. Now, Generative Artificial Intelligence ("Generative A.I.") and A.I.-generated music will inevitably send the music industry into a tailspin—and the law is not ready to grapple with the complexities that will arise. To wit, Generative A.I. is poised to threaten the very principles on which copyright law is founded: To encourage (human) creativity by protecting original works of expression. This Note seeks to protect human music copyright holders against the ever-growing threat of A.I.-generated music. Part I addresses A.I. technology and the legal uncertainties associated with A.I.-generated music. Part II discusses the current doctrine of music copyright infringement. Part III offers a series of proposals for how to adapt the current doctrine to ensure music copyright holders can protect their original works of human authorship against A.I.-generated works.

1. TAYLOR SWIFT, SHAKE IT OFF (Big Machine Records 2014).

† J.D. Candidate, Class of 2024, University of California College of the Law, San Francisco; Executive Articles Editor, *UC Law Journal*, Volume 75; B.A., 2015, Tulane University. The Author would like to thank Professor Ben Depoorter for his guidance, encouragement, and invaluable feedback.

INTRODUCTION

> Without art, we're not human. The ability to imagine and to take that imagination and make it into reality is one of the things that is *really* distinctive about humans. . . . And there is no better way to flex that creativity muscle than to do art, be exposed to art, and to think about art.
>
> —Agustín Fuentes[2]

In early April 2023, a song called "Heart on My Sleeve" went viral across social media platforms.[3] The track purportedly featured vocals by Drake and The Weeknd, but the anonymous user behind "Heart on My Sleeve" confirmed in a since-deleted TikTok that they used Generative Artificial Intelligence ("Generative A.I.") to replicate the artists' voices.[4] Universal Music Group, the label behind both artists, was able to have "Heart on My Sleeve" removed from music streaming platforms like Spotify, Apple Music, and YouTube.[5] But the song's (albeit brief) success "intensified alarms that were already ringing in the music business, where corporations have grown concerned about A.I. models learning from, and then diluting, their copyrighted material."[6] Corporations and music industry giants aside, the threat of copyright infringement posed by A.I.-generated works like "Heart on My Sleeve" looms above human artists and authors.[7]

The legal ramifications of Generative A.I. remain uncertain. As of this writing, human authorship is a threshold requirement to receive copyright protection stemming from over a century of settled jurisprudence.[8] As such, A.I.-generated works (musical, visual, literary, etc.) are unable to receive copyright protections because Generative A.I. is not an "author" in the traditional sense.[9] However, the U.S. Copyright Office's current stance that an element of human

---

2. Simon Worrall, *How Creativity Drives Human Evolution*, NAT'L GEOGRAPHIC (Apr. 22, 2017), https://www.nationalgeographic.com/culture/article/creative-spark-augustin-fuentes-evolution (interviewing Agustín Fuentes about his book, *The Creative Spark: How Imagination Made Humans Exceptional*).

3. Joe Coscarelli, *An A.I. Hit of Fake 'Drake' and 'The Weeknd' Rattles the Music World*, N.Y. TIMES (Apr. 24, 2023), https://www.nytimes.com/2023/04/19/arts/music/ai-drake-the-weeknd-fake.html.

4. Daysia Tolentino, *Viral AI-Powered Drake and The Weeknd Song Is Removed from Streaming Services*, NBC NEWS (Apr. 18, 2023, 12:04 PM), https://www.nbcnews.com/pop-culture/viral-ai-powered-drake-weeknd-song-removed-streaming-services-rcna80098.

5. *Id.*

6. Coscarelli, *supra* note 3.

7. *See* Kashmir Hill, *This Tool Could Protect Artists from AI-Generated Art That Steals Their Style*, N.Y. TIMES (Feb. 17, 2023), https://www.nytimes.com/2023/02/13/technology/ai-art-generator-lensa-stable-diffusion.html (discussing the potential threat of image generators like Stable Diffusion to human artists).

8. Adi Robertson, *The US Copyright Office Says an AI Can't Copyright Its Art*, THE VERGE (Feb. 21, 2022, 8:54 AM), https://www.theverge.com/2022/2/21/22944335/us-copyright-office-reject-ai-generated-art-recent-entrance-to-paradise.

9. Riddhi Setty, *Copyright Office Sets Sights on Artificial Intelligence in 2023*, BLOOMBERG L. (Dec. 29, 2022, 2:00 AM), https://news.bloomberglaw.com/ip-law/copyright-office-sets-sights-on-artificial-intelligence-in-2023.

authorship is necessary to receive protection,[10] does little to assuage the fear that A.I.-generated works will nevertheless harm an artist's ability to make a living off their art.[11]

For example, A.I. image generators like Stable Diffusion are "trained to recognize patterns, styles and relationships by analyzing billions of images collected from the public internet, alongside text describing their contents."[12] Because A.I. can access essentially anything available publicly online, artists grow increasingly afraid of posting their new works for "fear of feeding this monster."[13] This seemingly unlimited access harms an artist's ability to advertise their work, which may foreclose an important part of their business model.[14]

For artists, turning to copyright law to protect their exclusive rights to their works seems like the obvious course of action.[15] However, "[s]ome artists are skeptical that the law will ever catch up with [A.I.] technology, given the speed at which [A.I. technology] is developing."[16] That skepticism is warranted because the traditional copyright infringement analysis will prove unworkable for copyright holders against A.I.-generated works.[17] For a copyright infringement claim, the plaintiff must own a valid copyright and has the burden of proof to show that the defendant infringed upon protectable expression.[18] In the music context, this often (but not always) means that the plaintiff must show that the defendant's song could not exist if not for the plaintiff's earlier song.[19]

The test for copyright infringement is frequently referred to as the substantial similarity test.[20] The test has two distinct elements: first, actual copying, typically illustrated by circumstantial evidence that the defendant had access to the plaintiff's work such that any similarities are considered probative of copying ("probative similarity");[21] and second, unlawful appropriation, which asks if the ordinary lay observer (or listener) would recognize the elements of

10. Robertson, *supra* note 8.

11. Hill, *supra* note 7.

12. *Id.*

13. *Id.*

14. *Id.*

15. A class action lawsuit alleging copyright and right of publicity violations was recently filed against Stability AI among other art-generating services. *See id.*

16. Chloe Veltman, *When You Realize Your Favorite New Song Was Written and Performed by . . . AI*, NPR (Apr. 21, 2023, 5:00 AM), https://www.npr.org/2023/04/21/1171032649/ai-music-heart-on-my-sleeve-drake-the-weeknd.

17. Throughout this Note, "copyright holders" refers only to human authors and artists.

18. *See* Mark A. Lemley, *Our Bizarre System for Proving Copyright Infringement*, 57 J. COPYRIGHT SOC'Y U.S.A. 719, 721–22 n.14 (2010).

19. *See, e.g.*, ABKCO Music, Inc. v. Harrisongs Music, Ltd., 722 F.2d 988, 999 (2d Cir. 1983) (holding that George Harrison's "My Sweet Lord" subconsciously plagiarized the Chiffons' "He's So Fine").

20. The shorthand "substantial similarity" is a sometimes-confusing misnomer as will be discussed further in Part II, *infra*. *See generally* Lemley, *supra* note 18.

21. *See, e.g.*, Selle v. Gibb, 741 F.2d 896, 903–06 (7th Cir. 1984) (holding the Bee Gees' "How Deep Is Your Love" did not infringe upon Selle's "Let It End" because striking similarity alone is not sufficient proof without an additional showing of access).

the copyrighted work in the infringing work.[22] Note that showing access and a probative level of copying is increasingly difficult with the ubiquity of digital music streaming platforms as well as the increasing use of assistive software, making "[m]usic . . . more or less an assembly of other people's materials in certain spheres of popular music."[23]

If "the aim of copyright law is to protect and encourage human creativity," then it serves to reason that the law ought to protect human artists.[24] If the law allows Generative A.I. to use data gathered from the work of human authors—data that includes the work of songwriters or composers and of the listening habits of consumers[25]—and fails to tailor copyright protection for those works of human authorship, where might that leave us? Will artists continue to freely create if they know that as soon as their work lives in a digital space it can be stolen from them without legal recourse?[26] The fallout is potentially catastrophic for the creative world.

This Note—focusing on the Second and Ninth Circuits[27]—addresses the ways in which the current copyright infringement analysis will fail to protect music copyright holders against A.I.-generated musical works. Part I addresses A.I. technology and the legal uncertainties associated with A.I.-generated works through the lens of copyright law. Part II provides a brief overview of copyright infringement jurisprudence, and specifically delves into recent music copyright infringement cases in the Ninth Circuit. Part III presents a series of proposals to adapt the current doctrine to ensure music copyright holders can protect their original works of human authorship against A.I.-generated works.

I. LEGAL IMPLICATIONS REGARDING WORKS OF ARTIFICIAL AUTHORSHIP

Unlike in the days of early computing when algorithms were simple logic statements ("If X, then Y"), A.I. now uses "modern machine learning techniques . . . derived from training data."[28] By analyzing training data that includes "thousands, millions, or even billions of examples,"[29] A.I. produces a statistical model to "determine which characteristics within the data are

22. *See* Arnstein v. Porter, 154 F.2d 464, 468 (2d Cir. 1946).

23. Lauretta Charlton, *Why Copyright Infringement Became Pop's Big Problem, According to the 'Blurred Lines' Musicologist*, VULTURE (Dec. 11, 2015), https://www.vulture.com/2015/12/why-copyright-infringement-became-pops-big-problem.html.

24. Hill, *supra* note 7.

25. *See, e.g.*, Bill Hochberg, *Spotify Wants to Hook Users on AI Music Creation Tools*, FORBES (June 29, 2022, 9:57 AM), https://www.forbes.com/sites/williamhochberg/2022/06/29/spotify-is-developing-ai-tools-to-hook-users-on-music-creation/?sh=2a49c1164834.

26. *See, e.g.*, Christopher Reid, *Will AI Make Creative Workers Redundant?*, WALL ST. J. (Jan. 9, 2023, 6:15 PM), https://www.wsj.com/articles/will-ai-make-creative-workers-redundant-machine-learning-artificial-intelligence-technology-human-art-11673303015.

27. This Note focuses on these federal circuits because they reflect the majority approach of copyright infringement. *See, e.g.*, Lemley, *supra* note 18, at 722.

28. Tal Dadia, Chuan Lee, Tan Hui Xin, Harseerat Kaur & Dov Greenbaum, *Can AI Find Its Place Within the Broad Ambit of Copyright Law?*, 10 BERKELEY J. ENT. & SPORTS L. 37, 41 (2021).

29. Mark A. Lemley & Bryan Casey, *Fair Learning*, 99 TEX. L. REV. 743, 753 (2021).

statistically more likely to be indicative of the correct answer."[30] The A.I. then uses that model "to make predictions on novel data, mapping new inputs to predicted outputs."[31] Generative A.I. uses those machine learning techniques to generate new works, like musical works, images, and text.[32]

In March 2023, the U.S. Copyright Office said that "it had started studying issues raised by . . . [Generative A.I.] including the use of copyrighted materials to train [Generative A.I.] models,"[33] but many of the legal questions relating to A.I.-generated works have yet to be addressed. For example, since Generative A.I. cannot qualify as an "author," and therefore cannot register a copyright,[34] who owns the rights to an A.I.-generated musical work? The owner could be the company responsible for the Generative A.I. system, "the programmer who created [it], the original musician whose works provided the training data, or maybe even the [Generative A.I.] itself."[35] The lack of certainty regarding ownership highlights a common worry—"that a musician would have no legal recourse against a company that trained [a Generative A.I.] program to create soundalikes of them, without their permission."[36] The Subparts that follow will discuss the requirement of human authorship, introduce Generative A.I.'s implications on copyright law, and examine the specific problems regarding A.I.-generated musical works.

A. THE REQUIREMENT OF HUMAN AUTHORSHIP

Article I of the U.S. Constitution endows Congress with the power to legislate and regulate intellectual property protections "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[37] The legal backdrop for this Note is primarily the Copyright Act of 1976 ("Act").[38] Under the Act[39] as interpreted by the Supreme Court in *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*,[40] the basic requirements to acquire a copyright are that the work must (1) be original with a minimal level

30. Dadia et al., *supra* note 28, at 41.

31. *Id.* at 42.

32. John Quinn, *The Clash of Generative AI and Intellectual Property Law: What It Means for Businesses*, FORBES, (May 3, 2023, 9:00 AM), https://www.forbes.com/sites/forbesbusinesscouncil/2023/05/03/the-clash-of-generative-ai-and-intellectual-property-law-what-it-means-for-businesses/?sh=5e1940756c01.

33. Jessica Toonkel & Sarah Krouse, *Who Owns Spongebob? AI Shakes Hollywood's Creative Foundation*, WALL ST. J. (Apr. 4, 2023, 10:50 AM), https://www.wsj.com/articles/ai-chatgpt-hollywood-intellectual-property-spongebob-81fd5d15.

34. *See* U.S. COPYRIGHT OFF., COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 613.1 (3d ed. 2021) [hereinafter COMPENDIUM (THIRD)].

35. Andrew R. Chow, *'There's a Wide-Open Horizon of Possibility.' Musicians Are Using AI to Create Otherwise Impossible New Songs*, TIME (Feb. 5, 2020, 2:02 PM), https://time.com/5774723/ai-music/.

36. *Id.*

37. U.S. CONST. art. I, § 8, cl. 8.

38. 17 U.S.C. § 101 et seq.

39. *Id.* § 102.

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

of creativity; (2) be a work of authorship (most relevantly for this Note, a musical work); and (3) be fixed (written down, recorded, or otherwise embodied in a tangible form).[41] A work does not meet this *de minimis* requirement of creativity if "the creative spark is utterly lacking or so trivial as to be virtually nonexistent."[42] In addition, *Feist* recognized that the selection, arrangement, and coordination of facts can meet this threshold if done so in an original manner, "however . . . the selection and arrangement of facts cannot be so mechanical or routine as to require no creativity whatsoever."[43]

The requirement of human authorship has been recognized for over 200 years.[44] "This idea of human authorship first appeared in American case law at least as early as 1879, when the Supreme Court pronounced that writings are 'founded in the creative powers of the mind' and 'the fruits of intellectual labor.'"[45] In 1884, the Supreme Court extended copyright protections to photographs because such works were "representatives of original intellectual conceptions of the author" in *Burrow-Giles Lithographic Co. v. Sarony*.[46] The Court further clarified that an author is "he to whom anything owes its origin; originator; maker; one who completes a work of science or literature."[47] In so ruling, the Court reasoned that if a photograph were "merely mechanical" without any "novelty, invention, or originality" attributable to the human photographer, then copyright protection would not be available.[48]

Over a century later, the Ninth Circuit ruled that copyright protections do not extend to works of non-human authorship.[49] In *Urantia Foundation v. Kristen Maaherra*, the court held that "some element of human creativity must have occurred in order for the Book [authored by non-human spiritual beings] to be copyrightable."[50] The court further clarified that "it is not creations of divine beings that the copyright laws were intended to protect."[51]

Two decades later in *Naruto v. Slater*, the Ninth Circuit reasoned that because "[t]he Copyright Act does not expressly authorize animals to file copyright infringement suits under the statute," Naruto the macaque lacked statutory standing to sue under the Act.[52] In that case, Naruto allegedly took several "selfies" using wildlife photographer David Slater's unattended

41. *See id.* at 345 ("Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.").

42. *Id.* at 359.

43. *Id.* at 362.

44. *See* Christian E. Mammen & Carrie Richey, *AI and IP: Are Creativity and Inventorship Inherently Human Activities?*, 14 FIU L. REV. 275, 277 (2020).

45. *Id.* at 278 (quoting In re Trade-Mark Cases, 100 U.S. 82, 94 (1879)).

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

47. *Id.*

48. *Id.* at 59.

49. *See* Urantia Found. v. Maaherra, 114 F.3d 955, 958 (9th Cir. 1997).

50. *Id.*

51. *Id.*

52. Naruto v. Slater, 888 F.3d 418, 426 (9th Cir. 2018).

camera.[53] The selfies were later published in a book with the copyright being attributed to Slater and his publisher.[54] People for the Ethical Treatment of Animals ("PETA") attempted to sue for copyright infringement on Naruto's behalf, but was unsuccessful for lack of standing because Naruto was not an author.[55]

After *Naruto*, the U.S. Copyright Office clarified that an "original work of authorship is a work that is independently created by a *human author* and possess some minimal degree of creativity,"[56] using the definition of "author" from *Burrow-Giles* in the *Compendium of U.S. Copyright Office Practices*.[57] Not only that, but the Office stated that it "will not register works produced by a machine or mere mechanical process that operates randomly or automatically without any creative input or invention from a human author."[58] In other words, the Copyright Office "will refuse to register a claim if it determines that a *human being did not create the work*."[59]

However, critics of the Copyright Office's stance are quick to point out that Generative A.I. does not operate randomly nor automatically.[60] Rather, automation is the completion of fixed repetitive tasks without human intervention; automation is predictable in that it follows a clear set of rules. [Generative A.I.] is different in that, while it is not random, it is also not always predictable, it need not follow a set of rules and it can be employed to complete non-repetitive tasks, learning for prior tasks to predict and complete tasks better, without continued human intervention and instruction.[61]

Regardless, as of this writing, the Copyright Office has denied copyright registration to two visual works created autonomously by Generative A.I.[62] Most recently, the Office canceled the copyright registration for the images in Kris Kashtanova's eighteen-page comic, *Zarya of the Dawn*, because the images were created by Midjourney, a text-to-image Generative A.I.[63] The Office explained

53. *Id.* at 420.

54. *Id.*

55. *Id.* at 421.

56. U.S. Copyright Off., Copyright Basics (Sept. 2019), https://www.copyright.gov/circs/circ01.pdf (emphasis added).

57. COMPENDIUM (THIRD), *supra* note 34, § 613.1. It is worth acknowledging that the definition of "author" from *Burrow-Gilles* could also conceivably include Generative A.I. *See* Dadia et al., *supra* note 28, at 46–47.

58. COMPENDIUM (THIRD), *supra* note 34, § 313.2.

59. *Id.* § 306 (emphasis added).

60. Dadia et al., *supra* note 28, at 47.

61. *Id.*

62. *See Decision Affirming Refusal of Registration of A Recent Entrance to Paradise*, U.S. COPYRIGHT OFF. REVIEW BOARD, 1 (Feb. 14, 2022), https://www.copyright.gov/rulings-filings/review-board/docs/a-recent-entrance-to-paradise.pdf [hereinafter U.S. COPYRIGHT OFF., *Entrance to Paradise Rejection*]; *Decision Canceling Registration of Images Generated by Midjourney*, U.S. COPYRIGHT OFF., 1 (Feb. 21, 2023), https://copyright.gov/docs/zarya-of-the-dawn.pdf [hereinafter U.S. COPYRIGHT OFF., *Decision Canceling Midjourney Registration*].

63. Matt Ford, *Artificial Intelligence Meets Its Worst Enemy: The U.S. Copyright Office*, THE NEW REPUBLIC: THE SOAPBOX (Mar. 10, 2023), https://newrepublic.com/article/170898/ai-midjourney-art-copyright-office.

that the process by which Midjourney generates images "is not the same as that of a human artist, writer, or photographer . . . [because] the process is not controlled by the user."[64] Unlike Adobe Photoshop or other technological tools, Midjourney users do not have sufficient control over the generated images for them to qualify as products of an author's "intellectual convention."[65]

This human authorship requirement makes logical sense under a natural law theory of copyright law. Not only do we want to encourage authors and artists to produce expressive works for the betterment of society, but we want those authors and artists to possess certain exclusive rights to their work because they are entitled "to the fruits of their labors."[66] We want copyright law to protect the creative process. With this in mind, this Note turns next to some of the open questions regarding copyright law and Generative A.I.

B. COPYRIGHT LAW & GENERATIVE A.I.

Whether A.I.-generated works infringe the copyrighted works they are trained on is debatable. "Depending on how the machine uses the input data, the original human creators of the source material may claim that the machine's product is an infringing derivative work."[67] Such a complaint would likely argue that the Generative A.I. merely took elements of the copyright holder's work, "and then compiled them into a new product without copyright's necessary modicum of creativity."[68] Proponents against this argument posit that all Generative A.I. does is extract ideas (which are unprotected by copyright), just like all human copyright holders do per the adage: "Good artists copy, great artists steal."[69] From their viewpoint, arguing that Generative A.I. merely produces derivative works from its input data creates a double standard because human creators and A.I. generators use the same source material, yet:

> Humans get away with rampant lifting of earlier art in their copyrightable works, allowing them to benefit from further improvements or progress resulting from others' use of the same subject matter. . . . Yet in human creativity we argue the author's prior knowledge informed her work, which is novel and not derivative, while we criticize [Generative A.I.] for its dependence upon those same sources.[70]

64. U.S. COPYRIGHT OFF. *Decision Canceling Midjourney Registration*, *supra* note 62, at 8.

65. *Id.* at 9.

66. Margit Livingston & Joseph Urbinato, *Copyright Infringement of Music: Determining Whether What Sounds Alike Is Alike*, 15 VAND. J. ENT. & TECH. L. 227, 231–32 (2013).

67. Dadia et al., *supra* note 28, at 43.

68. *Id.*

69. *Id.* at 44.

70. *Id.* (quotation marks and citation omitted).

As will be discussed in Part II, the distinction between unprotectable ideas and protectable expressions of ideas in copyright is blurry at best.[71]

Another problem regarding a possible copyright infringement cause of action is that "given the number of works involved in training the [Generative A.I.], it is likely that the contribution of each copyrighted work is minimal."[72] If the Generative A.I. is trained on "crowdsourced data sets [using] many users' individuals inputs and interactions with the [Generative A.I.]," and the individual users contribute knowledge to Generative A.I.,[73] then the argument is that any incidental copying of those individual inputs is *de minimis* and therefore not infringement.[74] If an ordinary observer would not be able to "recognize the alleged copy as having been appropriated from the copyrighted work,"[75] then a jury or the court will not find substantial similarity between the two works.

This confluence between the idea-expression dichotomy and de minimis copying leads to another key issue: Should A.I.-generated works be considered fair use? The Copyright Act establishes that a work may be considered for fair use if used for "purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research." The Act lists the factors to consider as:

> (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
>
> (2) the nature of the copyrighted work;
>
> (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
>
> (4) the effect of the use upon the potential market for or value of the copyrighted work.[76]

One argument against a finding of fair use is that an A.I.-generated work is not sufficiently different in purpose or nature of the copyrighted work.[77] An A.I.-generated work is also likely for commercial use; and "[w]hile commercial uses are not presumptively unfair, they still tend to weigh against a finding of fair use" which "often goes hand in hand with a market effect."[78]

Most likely, the argument that A.I.-generated works should be considered fair use will rest on whether those works are sufficiently transformative. As Justice Souter wrote in *Campbell v. Acuff-Rose Music*:

---

71. *See generally* Nichols v. Universal Pictures Corp., 45 F.2d 119 (2d Cir. 1930) (holding that protection of literature is not limited to exact text, instead requiring substantial similarity and not trivial changes); Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49 (2d Cir. 1936).

72. Dadia et al., *supra* note 28, at 45.

73. Mammen & Richey, *supra* note 44, at 283.

74. Dadia et al., *supra* note 28, at 78.

75. Solid Oak Sketches, LLC v. 2K Games, Inc., 449 F. Supp. 3d 333, 344 (S.D.N.Y. 2020).

76. 17 U.S.C. § 107.

77. Lemley & Casey, *supra* note 29, at 765.

78. *Id.* (citation omitted).

> The central purpose of this investigation is to see . . . whether the new work merely supersedes the objects of the original creation . . . or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is "transformative."[79]

This "transformative use" inquiry, however, is not in the Copyright Act and in fact appears to create tension with the exclusive rights listed in the statute. Under § 106, a copyright holder has the exclusive right to prepare derivative works,[80] which includes "any other form in which a work may be recast, *transformed*, or adapted."[81]

Regardless, Generative A.I. defendants in the Second Circuit may rely on *Authors Guild v. Google, Inc.*[82] to argue that consuming digital content to create new works is a transformative use. In that case, authors of copyrighted books sued Google for copyright infringement because Google had "made digital copies of tens of millions of books . . . and established a publicly available search function" to allow users to search within the books.[83] The Second Circuit affirmed the district court's holding that Google was entitled to a fair use defense.[84] Most salient for this Note, the court concluded that "Google's making of a digital copy to provide a search function [was] a transformative use, which augment[ed] public knowledge by making available information *about* Plaintiffs' books without providing the public with a substantial substitute."[85]

In the Ninth Circuit, expressing the same sentiments and same messaging of the original copyrighted work is not a transformative use. In *Dr. Seuss Enterprises, L.P. v. ComicMix LLC*,[86] the Ninth Circuit rejected the defendant's fair use argument because the work "lack[ed] the benchmarks of transformative use."[87] In so reasoning, the Ninth Circuit listed the following considerations:

> (1) [a] further purpose or different character in the defendant's work, i.e., the creation of new information, new aesthetic, new insights and understanding;
>
> (2) new expression, meaning, or message in the original work, i.e., the addition of value to the original; and

79. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 579 (1994) (quotation marks and citation omitted).

80. 17 U.S.C. § 106(2).

81. *Id.* § 101 (emphasis added) (defining "derivative work"). Justice Sotomayor recently addressed this potential tension, noting in dicta that for fair use, "the degree of transformation required to make 'transformative' use of an original must go beyond that required to qualify as a derivative." Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith, 143 S. Ct. 1258, 1275 (2023).

82. Authors Guild v. Google, Inc., 804 F.3d 202 (2d Cir. 2015).

83. *Id.* at 207.

84. *Id.* at 208.

85. *Id.* at 207.

86. Dr. Seuss Enters., L.P. v. ComicMix LLC, 983 F.3d 443 (9th Cir. 2020) (a.k.a. *Oh, the Places You'll Go!* vs. *Oh, the Places You'll Boldly Go!*).

87. *Id.* at 453.

> (3) the use of quoted matter as raw material, instead of repackaging it and merely superseding the objects of the original creation.[88]

Adding new expression to the existing work was not a "get-out-of-jail-free card" because the defendant repackaged the plaintiff's work, and therefore their use did not possess "a further purpose or different character."[89] The defendant's work did not add value to the plaintiff's work via a new expression, meaning, or message,[90] and the raw material of the plaintiff's work was merely repackaged.[91] Thus, the Ninth Circuit concluded that the defendant was not entitled to a fair use defense.[92]

Under *Authors Guild* in the Second Circuit and *Dr. Seuss Enterprises* in the Ninth Circuit, an A.I.-generated musical work might be considered a transformative use depending on: (1) the purpose or character of the A.I.-generated work; (2) whether the A.I.-generated works adds additional value; and (3) whether the A.I.-generated work merely repackages the copyrighted work in order to supersede that work. Even after the incredibly narrow holding in the Supreme Court's recent transformative use case, *Andy Warhol Foundation for the Visual Arts v. Goldsmith*,[93] the precedential viability of both circuit cases seems to remain relatively unscathed.

Setting aside the question of transformative use, Professors Mark Lemley and Bryan Casey posit a "fair learning" standard for machine learning where the learning itself is a fair use: "When the defendant copies a work for reasons other than to have access to the protectable expression in that work, fair use should consider under both factors one and two whether the purpose of the defendant's copying was to appropriate the plaintiff's expression or just the idea."[94]

Curiously, Lemley and Casey characterize what they consider "the strongest argument for fair use [as] one that lies at the heart of copyright theory" rather than explicitly in the statute or the case law that Generative A.I. "systems generally copy works, not to get access to their creative expression (the part of the work the law protects), but to get access to the uncopyrightable parts of the work—the ideas, facts, and linguistic structure of the works."[95] This observation seems to hint at the intent of a Generative A.I. system when intent is not a factor in the statutory test for the fair use defense.[96]

---

88. *Id.* (quotation marks and citation omitted).

89. *Id.* at 453–54.

90. *Id.* at 454.

91. *Id.* at 454–55.

92. *Id.* at 461.

93. *See* Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith, 143 S. Ct. 1258, 1273 (2023) (holding that the commercial licensing of Warhol's "Orange Prince" to Condé Nast was not a fair use because the purpose and character of the use was not transformative and was a commercial use).

94. Lemley & Casey, *supra* note 29, at 750.

95. *Id.* at 772.

96. *See* 17 U.S.C. § 107.

It is also important to remember that this "fair learning" standard does not extend to whether fair use should exempt A.I.-generated works from copyright infringement liability. While it is possible that some A.I.-generated works would be considered transformative uses, even such A.I.-generated works may compete with the same market as that of the copyright holder.[97] For example, in the case of musical works, if the purpose is for a Generative A.I. to produce "a new pop song in the style of Taylor Swift," that "seem[s] more substitutive than transformative, so . . . fair use is unlikely to save them."[98]

Returning to the question of an A.I.-generated work's possible owner, the work for hire doctrine could shed some light. However, a work for hire must either be made (a) by "an employee" or (b) by one or more "parties [who] expressly agree in a written instrument signed by them that the work shall be considered a work made for hire."[99] Both instances require "a binding legal contract—an employment agreement or a work-for-hire agreement,"[100] which would require the Generative A.I. to "have the capacity to enter into contracts (and the ability to sign written instruments)."[101] Since Generative A.I. cannot execute legally binding contracts, A.I.-generated works cannot meet this requirement; thus, A.I.-generated works would not fall under the work for hire doctrine.[102]

At minimum, if the A.I.-generated works directly infringe on protected expression and the fair use defense is unavailable, the company who owns the source code responsible for the A.I.-generated work, and more specifically the programmer(s) who wrote it, could be sued on a theory of indirect infringement. In *MGM Studios Inc. v. Grokster, Ltd.*,[103] Justice Souter, writing for the Court, held "that one who 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, is liable for the resulting acts of infringement by third parties."[104] The case concerned peer-to-peer file sharing networks with a group of copyright holders, "including motion picture studios, recording companies, songwriters, and music publishers" suing Grokster and StreamCast "for their users' copyright infringements, alleging that they knowingly and intentionally distributed their software to enable users to reproduce and distribute the copyright works."[105]

According to a statistician commissioned by MGM, almost ninety percent of the files shared on Grokster's system were copyrighted works—a statistic that

97. Lemley & Casey, *supra* note 29, at 777–78.
98. *Id.* at 778.
99. 17 U.S.C. § 101.
100. *See* U.S. COPYRIGHT OFF., *Entrance to Paradise Rejection*, *supra* note 62, at 6.
101. Mammen & Richey, *supra* note 44, at 285.
102. *See* U.S. COPYRIGHT OFF., *Entrance to Paradise Rejection*, *supra* note 62, at 6–7.
103. Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).
104. *Id.* at 936–37.
105. *Id.* at 920–21.

the Court found persuasive.[106] The record of the case also supported a finding that the Respondents were both indirectly and directly "aware that [their] users employ their software primarily to download copyrighted files" and that the Respondents encouraged infringement.[107] In fact, Respondents' business models both "confirm[ed] that their principal object was [the] use of their software to download copyrighted works."[108] The Court also found it persuasive that "there [was] no evidence that either company made an effort to filter copyrighted material form users' downloads or otherwise impede the sharing of copyrighted files."[109] Thus, the Court reasoned that:

> When a widely shared service or product is used to commit [copyright] infringement, it may be impossible to enforce rights in the protected work effectively against all direct infringers, the only practical alternative being to go against the distributer of the copying device for secondary liability on a theory of contributory or vicarious infringement.[110]

The Court further explained, "[o]ne infringes contributorily by intentionally inducing or encouraging direct infringement, and infringes vicariously by profiting from direct infringement while declining to exercise the right to stop or limit it."[111]

Under *Grokster*, the owner or programmer of a Generative A.I. model could be liable based on a theory of inducement, which "premises liability on purposeful, culpable expression and conduct."[112] One manner of inducement that the Court highlighted in *Grokster* is "advertisement or solicitation that broadcasts a message designed to stimulate others to commit violations."[113] However, an advertisement is "not [the] exclusive way of showing that steps were taken with the purpose of bringing about infringing acts, and of showing that infringing acts took place by using the device distributed."[114] From the fact that Generative A.I. necessarily uses copyrighted material, which users can prompt the Generative A.I. to use by referring to the styles of prominent artists, there is grounds to believe that an inducement theory might be successful, particularly regarding musical works.

106. *Id.* at 933.
107. *Id.* at 923.
108. *Id.* at 926.
109. *Id.*
110. *Id.* at 929–30.
111. *Id.* at 930.
112. *Id.* at 937.
113. *Id.*
114. *Id.* at 938.

C. A.I.-GENERATED MUSICAL WORKS

In October 2022, the Recording Industry Associated of America ("RIAA") responded to a submission request from the Office of the U.S. Trade Representative, listing A.I.-generated music platforms as threats to the music industry.[115] The RIAA wrote that training A.I. music generators on their members' works is an authorized use that "infringes [their] members' rights by making unauthorized copies of [their] work."[116] In effect, to the RIAA, "the files these [A.I.] services disseminate are either unauthorized copies or unauthorized derivative works of [their] members' music."[117] In other words, A.I.-generated music infringes upon a copyright owner's statutorily guaranteed exclusive rights "to reproduce the copyrighted work"[118] and "to prepare derivative works."[119]

Despite how A.I.-generated music seems to violate those exclusive rights, not every artist believes Generative A.I. poses a threat. Some artists even believe that Generative A.I. will "spur a new golden era of creativity," with Generative A.I. as "a democratizing force and an essential part of everyday musical creation."[120] For instance, Endel, an A.I.-powered app that generates personalized soundscapes that adapt in real-time to factors like "the weather, the listener's heart rate, physical activity rate, and circadian rhythms . . . turn[s] non-musicians into sonic curators, allowing them to become involved in a process they might have been shut out of due to lack of training or background."[121] From a utilitarian perspective, this sort of creation would support one of the fundamental imperatives of our intellectual property system: to further the public domain.[122]

In terms of the technology itself, the Generative A.I. currently utilized "for music is essentially advanced productivity tools, which humans still ultimately control."[123] From that standpoint, Generative AI handles the "fiddly, time-consuming, tedious tasks that eat up time which [artists] could spend on the uniquely human *creative* side of things."[124] This characterization of Generative A.I. emphasizes that "[t]he artist still makes choices about style, instrumentation, and BPM; they can edit, cut and paste, delete and play with the stems the A.I. generates; they're still the creator, just using a modern

115. Samantha Cole, *Record Labels Say AI Music Generators Threaten Music Industry*, VICE: MOTHERBOARD (Oct. 21, 2023, 2:27 PM), https://www.vice.com/en/article/pkgxqz/record-labels-say-ai-music-generators-threaten-music-industry.

116. *Id.*

117. *Id.*

118. 17 U.S.C. § 106(1).

119. *Id.* § 106(2).

120. *See* Chow, *supra* note 35.

121. *Id.*

122. *See* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984); *see also* Livingston & Urbinato, *supra* note 66, at 231.

123. Kelly Bishop, *Is AI Music a Genuine Threat to Real Artists?*, VICE (Feb. 16, 2023, 3:27 PM), https://www.vice.com/en/article/88qzpa/artificial-intelligence-music-industry-future.

124. *Id.* (emphasis in original).

springboard for ideas."[125] In other words, artists using Generative A.I. might save time or effort, while retaining creative control.[126]

While speeding up the songwriting process might appeal to some, "[f]or many artists, writing songs is a process, a therapy, a journey, and speeding up that process to the extent of churning out an entire song from a brief text prompt surely can't be as satisfying—nor will it have the same intrinsic value."[127] In addition, a consumer might desire that emotional component in the music they listen to, which a Generative A.I. cannot completely replicate.[128]

As the release of "Heart on My Sleeve" illustrates, a Generative A.I. can, however, replicate the vocals of brand-name artists.[129] Using A.I. trained on an artist's catalog, a person can write a song, record it with their human vocals, and then replace their voice with A.I. imitations of that artist.[130] For this type of A.I.-generated musical work, *Midler v. Ford Motor Co.* is instructive.[131] In that case, Bette Midler sued Ford Motor Company for using a "sound alike" that imitated her voice in an advertising campaign.[132] The Ninth Circuit noted that under copyright law, "[m]ere imitation of a recorded performance would not constitute a copyright infringement even where one performer deliberately sets out to simulate another's performance as exactly as possible."[133] Not only that, but the sounds of a voice are not "fixed in any tangible medium of expression,"[134] which means that "[a] voice is not copyrightable."[135] The Ninth Circuit did however hold "that 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."[136] In recognizing voice misappropriation as a violation of the right of publicity,[137] the Ninth Circuit reasoned:

> A voice is as distinctive and personal as a face. The human voice is one of the most palpable ways identity is manifested . . . . A fortiori, these observations hold true of singing, especially singing by a singer of renown. The singer

125. *Id.*

126. Some supporters argue Generative A.I. "will make it easier and faster to brainstorm ideas," giving artists their nights and weekends back. *See* Will Douglas Heaven, *Generative AI is Changing Everything. But What's Left When the Hype Is Gone?*, MIT TECH. REV. (Dec. 16, 2022), https://www.technologyreview.com/2022/12/16/1065005/generative-ai-revolution-art/.

127. *See* Bishop, *supra* note 123.

128. *See* Coscarelli, *supra* note 3.

129. *Id.*

130. *Id.*

131. *See* Midler v. Ford Motor Co., 849 F.2d 460 (9th Cir. 1988).

132. *Id.* at 461.

133. *Id.* at 462.

134. 17 U.S.C. § 102(a).

135. *Midler*, 849 F.2d at 462.

136. *Id.* at 463.

137. *See* Waits v. Frito-Lay, Inc., 978 F.2d 1093, 1098 (9th Cir. 1992), *abrogated on other grounds by* Lexmark Int'l, Inc. v. Static Control Components, Inc., 572 U.S. 118 (2014) (explaining that "[t]he *Midler* tort is a . . . violation of the 'right of publicity,' the right of a person whose identity has commercial value . . . to control the commercial use of that identity.").

> manifests herself in the song. To impersonate her voice is to pirate her identity.[138]

Thus, at least in the Ninth Circuit, a well-known artist recognized by their distinctive voice could seek legal recourse outside the realms of copyright law should a Generative A.I. copy their voice without express permission.[139]

As it stands, there are many open questions related to Generative A.I. and copyright law. In Part II, this Note will examine the current doctrine of copyright infringement and the test of substantial similarity as applied to popular music to illustrate the confusion already present in music copyright infringement—even without the added issues specific to Generative A.I.

II. A "STANDARDIZED" APPROACH TO COPYRIGHT INFRINGEMENT

To assert a claim for copyright infringement, the plaintiff must prove (1) that she owns a valid copyright and (2) that the defendant copied "constituent elements of the work that are copyrightable."[140] The test whether copying occurred contains two separate elements that are often referred together colloquially as a test to prove "substantial similarity" between the two works.[141] The first is a showing that the alleged infringer copied the copyright holder's expression, typically through evidence of access and probative similarity.[142] The second is a showing of unlawful appropriation,[143] which entails that the defendant copied some amount of protected expression that created a substantially similar work when compared with the plaintiff's work.[144] The question of how much copying is necessary for infringement is unclear,[145] but according to the legislative history of § 106 of the 1976 Copyright Act,[146]

---

138. *Midler*, 849 F.2d at 463.

139. California's tort for voice misappropriation withstood a copyright preemption challenge and remains good law today. *See Frito-Lay*, 978 F.2d at 1100 (clarifying the elements for voice misappropriation as (1) deliberate imitation of a plaintiff's voice that is (2) "sufficiently distinctive and widely known to give him a protectable right in its use").

140. *See* Bridgmon v. Array Sys. Corp., 325 F.3d 572, 576 (5th Cir. 2003); *see also* Swirsky v. Carey, 376 F.3d 841, 844 (9th Cir. 2004).

141. *See* Skidmore as Tr. for Randy Craig Wolfe Tr. v. Led Zeppelin, 952 F.3d 1051, 1064 (9th Cir. 2020) (en banc) ("The . . . infringement analysis contains two separate components: 'copying' and 'unlawful appropriation.' Although these requirements are too often referred to in shorthand lingo as the need to prove 'substantial similarity,' they are distinct concepts.") (internal citations omitted).

142. For this first prong, "probative similarity" refers to a showing "that the similarities between the two works are due to copying rather than coincidence, independent creation, or prior common source." *See id.* (internal quotations omitted). This element of probative or striking similarity in the first prong often causes confusion since the second prong requires a finding of substantial similarity and courts frequently use "substantial similarity" for both prongs. *See generally* Lemley, *supra* note 18.

143. *See Skidmore*, 952 F.3d at 1064.

144. Lydia Pallas Loren & R. Anthony Reese, *Proving Infringement: Burdens of Proof in Copyright Infringement Litigation*, 23 LEWIS & CLARK L. REV. 621, 633 (2019).

145. The Second Circuit reasoned that "[e]ven a small amount of the original, if it is qualitatively significant, may be sufficient to be an infringement." *See* Horgan v. Macmillan, Inc., 789 F.2d 157, 162 (2d Cir. 1986).

146. 17 U.S.C. § 106 (listing the exclusive rights of copyright holders).

> [A] copyrighted work would be infringed by reproducing it *in whole or in any substantial part*, and by duplicating it exactly or by imitation or simulation. Wide departures or variations form the copyright works would still be an infringement as long as the author's 'expression' rather than merely the author's 'ideas' are taken.[147]

Although courts differ on how to determine what constitutes substantial similarity, the Second Circuit and Ninth Circuit formulations reflect the majority approach and as such are the focus of this Note.[148] The Subparts below will address the foundational cases in the Second Circuit and the Ninth Circuit, and how the substantial similarity analysis has played out in recent, high-profile, popular music copyright infringement lawsuits in the Ninth Circuit.

A. A BRIEF HISTORY OF COPYRIGHT INFRINGEMENT IN THE SECOND AND NINTH CIRCUITS

The Second Circuit set forth the standard for proving copyright infringement in *Arnstein v. Porter* in 1946.[149] In that case, Ira Arnstein argued that a slew of Cole Porter's works like "Begin the Beguine," "My Heart Belongs to Daddy," and "Night and Day" infringed upon Arnstein's own compositions.[150] On an appeal from summary judgment in favor of Porter, the Second Circuit held that the works sounded similar and whether or not Porter had access to Arnstein's compositions was a material question of fact for the jury to decide.[151] Thus, the *Arnstein* court reversed and remanded for a full trial.[152]

To show the first element of copying under the standard described in *Arnstein*, "the evidence may consist (a) of defendant's admission that he copied or (b) of circumstantial evidence—usually evidence of access—from which the trier of facts may reasonably infer copying."[153] Since defendants will rarely admit to copying outright, *Arnstein* details how plaintiffs can show circumstantial evidence—by providing evidence of probative similarities and evidence of access.[154] The *Arnstein* court further explained that "if evidence of access is absent, the similarities must be so striking as to preclude the possibility

147. H.R. REP. NO. 94-1476, at 61 (1976) (emphasis added).
148. *See* Lemley, *supra* note 18, at 719–26.
149. Arnstein v. Porter, 154 F.2d 464 (2d Cir. 1946).
150. *Id.* at 467.
151. *Id.* at 469–70.
152. *Id.* at 475.
153. *Id.* at 468.
154. *Id.*

that plaintiff and defendant independently arrived at the same result."[155] In addition, the *Arnstein* court noted that "[i]n some cases, the similarities between the plaintiff's and defendant's work are so extensive and striking as, without more, to justify an inference of copying and to prove improper appropriation. But such double-purpose evidence is not required."[156] For this first element of copying, analytical dissection is appropriate, meaning that "experts may deconstruct a musical composition into its component parts—melody, harmony, rhythm, texture, and formal structure—and use their expertise to make informed comparisons about the resemblances between the two works according to music theory."[157]

The *Arnstein* ruling notes that the second element of unlawful appropriation only arises once the plaintiff establishes the first element of copying.[158] For unlawful appropriation (sometimes called "improper misappropriation"), the copying at issue "must include a more than *de minimis* amount of copyrightable expression" to constitute substantial similarity.[159] *Arnstein* also clarifies that for musical works, an "ordinary lay hearer" determines the extent to which the defendant's copying is sufficient to infringe upon a plaintiff's protected expression so as to violate a plaintiff's copyright interest.[160] In addition, *Arnstein* stands for the principle that because analyzing substantial similarity in music is so subjective and a jury most accurately reflects the standards of an ordinary listener, deciding music copyright infringement cases on summary judgment should be disfavored.[161]

Importantly, a defendant will only be liable for copyright infringement if the alleged unlawful appropriation is of a plaintiff's *protected* expression. Over a decade prior to *Arnstein*, Judge Learned Hand, writing for the Second Circuit, framed the inquiry for unlawful appropriation in *Nichols v. Universal Pictures Corporation*.[162] There, the plaintiff had authored a play (*Abie's Irish Rose*) and brought suit against the defendant's "motion picture play" (*The Cohens and The Kellys*) for copyright infringement.[163] Both plays followed two families in New York, one of Jewish faith and the other of Irish heritage, and their various conflicts with each other because of their differences in faith and cultural

155. *Id.* This formulation suggested a sliding scale, which later became known as the inverse ratio rule, which this Note will discuss in greater depth in Part III.A *infra*. *See* Shipman v. RKO Radio Pictures, Inc., 100 F.2d 533, 537 (2d Cir. 1938) ("[W]here there is access, there is a high degree of probability that the similarity results from copying and not from independent thought and imagination. Indeed, it might well be said that where access is proved or admitted, there is a presumption that the similarity is not accidental.").

156. *Arnstein*, 154 F.2d at 468–69.

157. Livingston & Urbinato, *supra* note 66, at 258 (discussing Arnstein v. Porter, 154 F.2d 464 (2d Cir. 1946)).

158. *Arnstein*, 154 F.2d at 468.

159. *See* Lemley, *supra* note 18, at 720.

160. *Arnstein*, 154 F.2d at 468.

161. *Id.* at 471; *see also* Livingston & Urbinato, *supra* note 66, at 259 (discussing Arnstein v. Porter, 154 F.2d 464 (2d Cir. 1946)).

162. Nichols v. Universal Pictures Corp., 45 F.2d 119 (2d Cir. 1930).

163. *Id.* at 120.

heritage.[164] Judge Hand noted the problems of identifying whether there was unlawful appropriation in a copyright infringement analysis:

> Upon any work, and especially upon a play, a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the play is about, and at times might consist only of its title; but *there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright could prevent the use of his 'ideas,' to which, apart from their expression, his property is never extended*. Nobody has ever been able to fix that boundary, and nobody ever can. In some cases, the question has been treated as though it were analogous to lifting a portion out of the copyrighted work; but the analogy is not a good one, because, though the skeleton is a part of the body, it pervades and supports the whole. In such cases we are rather concerned with *the line between expression and what is expressed*.[165]

In other words, Judge Hand drew a distinction between an author's *expression* and the *ideas* that form the basis of that expression.[166] In *Nichols*, the common matters between the two plays were "a quarrel between a Jewish and an Irish father, the marriage of their children, the birth of grandchildren and a reconciliation."[167] These common themes were "too generalized an abstraction" and therefore, "only a part of [the plaintiff's] ideas," which were unprotected by copyright.[168] Thus, the Second Circuit affirmed the lower court's dismissal.[169]

The separation articulated in *Nichols*—between the author's expression and the ideas expressed—to determine whether unlawful appropriation has occurred has neither resulted in clear nor consistent precedent. For example, six years later in *Sheldon v. Metro-Goldwyn Pictures Corporation*, the Second Circuit examined another copyright infringement lawsuit between a play and a "picture play," again with an opinion authored by Judge Learned Hand.[170] In *Sheldon*, the plaintiff had authored a play based on a famous murder trial, drawing from historical facts while also altering characters, events, and other

164. *See id.* at 120–21 (discussing the two plays in detail).

165. *Id.* at 121 (internal citations omitted) (emphasis added). This passage has since been referred to as Judge Learned Hand's "abstractions test." *See* Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157, 1163 (9th Cir. 1977), *overruled in part by* Skidmore as Tr. for Randy Craig Wolfe Tr. v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (en banc).

166. *Nichols*, 45 F.2d at 121.

167. *Id.* at 122. The Ninth Circuit later explained further that this distinction reflects an "attempt[] to reconcile two competing social interests: rewarding an individual's creativity and effort while at the same time permitting the nation to enjoy the benefits and progress from use of the same subject matter." *See Krofft*, 562 F.2d at 1163.

168. *Nichols*, 45 F.2d at 122.

169. *Id.* at 123.

170. Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 49 (2d Cir. 1936).

details.[171] The defendants made a film based on the same murder trial, arguing that those events were in the public domain and therefore they did not infringe upon the plaintiff's play.[172] However, the Second Circuit was unpersuaded in their analysis of both the protected elements and the unprotected elements of the two works:

> The play is the sequence of the confluents of all these [theatrical] means, bound together in an inseparable unity; it may often be most effectively pirated by leaving out the speech, for which a substitute can be found, which keeps the whole dramatic meaning. That as it appears to us is exactly what the defendants have done here; the dramatic significance of the scenes we have recited is the same, almost to the letter. True, much of the picture owes nothing to the play; some of it is plainly drawn from the novel; but that is entirely immaterial; it is enough that substantial parts were lifted; no plagiarist can excuse the wrong by showing how much of his work he did not pirate.[173]

In *Sheldon*, it did not matter that both works contained significant portions that were traceable to the public domain—the fact that the court could point to substantial parts used in the defendant's picture play that were lifted from the plaintiff's play was sufficient to show unlawful appropriation.[174]

However, over four decades later, the Second Circuit excluded unprotectable elements from the analysis for unlawful appropriation in *Hoehling v. Universal City Studios, Inc*.[175] This case also concerned historical events, namely "the triumphant introduction, last voyage, and tragic destruction of the Hindenburg, the colossal dirigible constructed in Germany during Hitler's reign."[176] A.A. Hoehling published an extensively researched book, *Who Destroyed the Hindenburg?* in 1962.[177] Ten years later, Michael MacDonald Mooney relied on some of the details presented in Hoehling's book and published his own book, *The Hindenburg*, to which Universal City Studios subsequently purchased the film rights.[178] Hoehling sued both Mooney and Universal for copyright infringement, arguing that under *Sheldon*, "while ideas themselves are not subject to copyright, his 'expression' of his idea is copyrightable."[179]

The Second Circuit rejected this argument, holding that when "the idea at issue is an interpretation of an historical event . . . such interpretations are not

171. *Id.* at 49–52 (reciting the historical events and the plaintiff's theatrical adaptation).
172. *Id.* at 52–53 (recounting the defendant's film plotline).
173. *Id.* at 55–56 (emphasis added).
174. *Id.* at 56.
175. Hoehling v. Universal City Studios, Inc., 618 F.2d 972, 979–80 (2d Cir. 1980).
176. *Id.* at 974.
177. *Id.* at 975.
178. *Id.* at 975–76.
179. *Id.* at 978.

copyrightable as a matter of law."[180] The court reasoned that as a matter of a policy, "broad latitude must be granted to . . . authors who make use of historical subject matter, including theories or plots."[181] Therefore, the court affirmed the lower court's grant of summary judgment to the defendants.[182]

The distinction between uncopyrightable ideas and copyrightable expressions of ideas is a frequent problem for copyright infringement. In *Sid & Marty Krofft Television Productions Inc. v. McDonald's Corporation*,[183] the Ninth Circuit introduced the "extrinsic test" and the "intrinsic test," a bifurcated inquiry to determine whether the expression of ideas was copied.[184] In that case, the Ninth Circuit affirmed the district court's judgment for the plaintiffs, agreeing that there was sufficient evidence to show substantial similarity between the plaintiffs' copyrighted children's television show and the defendants' television commercials.[185] The Ninth Circuit also incorporated the "inverse ratio rule" to note that in some cases, a high degree of access might allow for a lesser showing of similarity.[186]

As articulated in *Krofft*, the extrinsic test is a factual one where "analytic dissection and expert testimony are appropriate" that looks to the "similarity of ideas."[187] The extrinsic test analyzes specific criteria, like "the type of artwork involved, the materials used, the subject matter, and the setting for the subject."[188] If, based on the extrinsic test, "there is a substantial similarity in ideas," then the intrinsic test determines "whether there is substantial similarity in the expressions of the ideas so as to constitute infringement."[189] The intrinsic test does not allow analytic dissection or expert testimony, but rather relies "on the response of the ordinary reasonable person."[190] In other words, the extrinsic test analyzes the first prong of the basic two-step approach for copyright infringement (copying), while the intrinsic test analyzes the second prong (unlawful appropriation).[191]

In sum, for copyright infringement in both the Second and Ninth Circuits, the plaintiff must own a copyrighted work; the defendant must have had access

180. *Id.* at 978.

181. *Id.*

182. *Id.* at 980.

183. Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157 (9th Cir. 1977), *overruled in part by* Skidmore as Tr. For Randy Craig Wolfe Tr. v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (en banc).

184. *Krofft*, 562 F.2d at 1164–65.

185. *Id.* at 1161.

186. *Id.* at 1172.

187. *Id.* at 1164.

188. *Id.*

189. *Id.*

190. *Id.*

191. *See* Lemley, *supra* note 18, at 723; *see also* Livingston & Urbinato, *supra* note 66, at 260 ("Although the Ninth Circuit's terminology does not track *Arnstein v. Porter*, the notion of formally dissecting and comparing the disputed works with the aid of expert testimony and then having the trier of fact adjudge the similarity between them to the average lay person is common to both circuits.").

to the plaintiff's work; and the defendant must have copied copyrightable expression, not just uncopyrightable ideas. The ways in which this analysis has played out in recent years for musical works does little to clarify the inconsistent pieces of a substantial similarity analysis.

B. COPYRIGHT INFRINGEMENT AS APPLIED TO POPULAR MUSIC IN THE NINTH CIRCUIT

Copyright infringement and the substantial similarity analysis as applied to musical works has long been fraught with confusion. For instance:

> Courts traditionally deemed melody (that is, the series of tones of particular durations that you might offer if asked to hum a few bars) to be the finger prints [sic] of the composition that establish its identity. That definition places melodic likeness at the center of music infringement cases, alongside only the literary content of any accompanying lyrics. Rhythm, harmony, orchestration, and organizational structure are ostensibly peripheral.[192]

Yet, in *Williams v. Gaye*—a decision that shocked the music world—the Ninth Circuit held that even though the melodies differed, "Blurred Lines" composed by the plaintiffs[193] infringed upon the copyright of Marvin Gaye's "Got to Give It Up" because the songs featured similar percussive and other basic elements.[194]

On appeal, the plaintiffs argued that "Got to Give It Up" should only enjoy "thin" copyright protection; but the Ninth Circuit rejected that argument, reasoning that "[m]usical compositions are not confined to a narrow range of expression,"[195] nor a narrow range of protection. The Ninth Circuit further explained that "'[m]usic . . . is not capable of ready classification into only five or six constituent elements,' but is instead 'comprised of a large array of elements, some combination of which is protectable by copyright.'"[196]

Williams also underscored that a copyright holder may show that a purported infringer had access to the copyrighted work "based on a theory of widespread dissemination and subconscious copying," meaning, a copyright holder need not show intentional copying for the first extrinsic test.[197] The question of access therefore coincides with the showing of "substantial extrinsic

192. Joseph P. Fishman, *Music As A Matter of Law*, 131 HARV. L. REV. 1861, 1863 (2018).

193. Pharrell Williams, Robin Thicke, and Clifford Harris, Jr. began this litigation by filing a complaint for declaratory relief rather than settle out of court. *See* Regina Zernay, Comment, *Casting the First Stone: The Future of Music Copyright Infringement Law After Blurred Lines, Stay with Me, and Uptown Funk*, 20 CHAP. L. REV. 177, 195 (2017).

194. Williams v. Gaye, 895 F.3d 1106, 1117 (9th Cir. 2018).

195. *Id.* at 1120.

196. *Id.* (quoting Swirsky v. Carey, 376 F.3d 841, 849 (9th Cir. 2004)).

197. *Id.* at 1123 (internal quotations omitted).

similarity."[198] Here, the Ninth Circuit reasoned that there was sufficient evidence of substantial extrinsic similarity because the plaintiffs' experts "testified that nearly every bar of 'Blurred Lines' contains an area of similarity to 'Got To Give It Up' . . . including the songs' signature phrases, hooks, bass melodies, word painting, the placement of the rap and 'parlando' sections, and structural similarities on a sectional and phrasing level."[199] This reasoning has since led critics to note that in affirming the lower court, the Ninth Circuit effectively allowed the Estate of Marvin Gaye to copyright a musical style, which could result in a chilling effect.[200]

Just two years later, the Ninth Circuit employed a more traditional music copyright infringement analysis in *Skidmore v. Led Zeppelin*.[201] In *Skidmore*, the estate of Spirit guitarist Randy Wolfe alleged that Led Zeppelin's "Stairway to Heaven" infringed upon Spirit's "Taurus." [202] At trial, a jury found that the two songs were not substantially similar and ruled in favor of Zeppelin.[203] On appeal, the Ninth Circuit opined the difficulty of showing probative similarity under the extrinsic test:

> Because independent creation is a complete defense to copyright infringement, a plaintiff must prove that a defendant copied the work. In the absence of direct evidence of copying . . . the plaintiff can attempt to prove it circumstantially by showing that the defendant had access to the plaintiff's work and that the two works share similarities probative of copying. This type of probative or striking similarity shows that the similarities between the two works are due to copying rather than . . . coincidence, independent creation, or prior common source.[204]

The Ninth Circuit also reiterated that the extrinsic test "compares the objective similarities of specific expressive elements in the two works."[205] To evaluate the alleged similarities under the extrinsic test, the court only considers the protected expression, so part of the extrinsic analysis must "distinguish between the protected and unprotected material in a plaintiff's work."[206] For the

198. *Id.* at 1123–24.

199. *Id.* at 1127.

200. *See id.* at 1138 (Nguyen, J., dissenting); *see also* Erin Fuchs, *That Huge 'Blurred Lines' Verdict Came Out of Left Field and Sets a Terrible Precedent*, BUS. INSIDER (May 10, 2023, 2:53 PM), https://www.businessinsider.com/copyright-lawyers-are-shocked-by-the-robin-thicke-blurred-lines-verdict-2015-3; *and* Adrienne Gibbs, *Marvin Gaye's Family Wins 'Blurred Lines' Appeal; Pharrell, Robin Thicke Must Pay*, FORBES (May 15, 2023, 6:53 AM), https://www.forbes.com/sites/adriennegibbs/2018/03/21/marvin-gaye-wins-blurred-lines-lawsuit-pharrell-robin-thicke-t-i-off-hook/?sh=286e1299689b.

201. Skidmore v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (en banc).

202. *Id.* at 1056.

203. *Id.*

204. *Id.* at 1064 (internal citations and quotations omitted).

205. *Id.*

206. *Id.*

intrinsic test, the court uses an ordinary reasonable observer standard without expert assistance to evaluate the alleged "similarity of expression."[207]

In affirming the district court's judgment, the Ninth Circuit reasoned that "[j]ust as we do not give an author 'a monopoly over the note of B-flat,' descending chromatic scales and arpeggios cannot be copyrighted by any particular composer."[208] Further, the court noted that it has "held that 'a four-note sequence common in the music field' is not the copyrightable expression in a song."[209] Not only that, but the court had also previously "concluded that taking six seconds of the plaintiff's four-and-a-half-minute sound recording—spanning three notes—is de minimis, inactionable copying."[210] Moreover, the Ninth Circuit explained that their stance is in accordance with the U.S. Copyright Office, "classifying a 'musical phrase consisting of three notes' as de minimis and thus not meeting the 'quantum of creativity' required under *Feist*."[211]

With *Skidmore*, the Ninth Circuit took advantage of Skidmore's proffering of the "inverse ratio rule" to abrogate the rule from its copyright infringement jurisprudence, overruling a litany of cases and thereby joining the majority of circuit courts that have considered the rule.[212] The inverse ratio rule dictates that "the stronger the evidence of access, the less compelling the similarities between the two works need to be in order to give rise to an inference of copying."[213] According to the Ninth Circuit in *Skidmore*, the rule "defies logic" and is inapposite because of the unique problems that the increasingly digital world created regarding the concept of "access" in copyright infringement: "Given the ubiquity of ways to access media online, from YouTube to subscription services like Netflix and Spotify, access may be established by a trivial showing that the work is available on demand."[214] This trivial showing "unfairly advantages those whose work is *most* accessible by lowering the standard of proof for similarity."[215] Moreover, "nothing in copyright law suggests that a work deserves stronger legal protection simply because it is more popular or owned by better-funded rights holders."[216] Therefore, the Ninth Circuit reasoned that while access can be considered "as circumstantial evidence of actual copying," but proof of access cannot be used to subsume a showing of actual copying.[217]

---

207. *Id.*

208. *Id.* at 1070–71 (quoting Swirsky v. Carey, 376 F.3d 841, 851 (9th Cir. 2004)).

209. *Id.* at 1071 (quoting Granite Music Corp. v. United Artists Corp., 532 F.2d 718, 721 (9th Cir. 1976)).

210. *Id.* (referring to Newton v. Diamond, 388 F.3d 1189, 1195–96 (9th Cir. 2004).

211. *Id.* (quoting COMPENDIUM (THIRD) *supra* note 34, § 313.4(B)); *see also* Darrell v. Joe Morris Music Co., 113 F.2d 80, 80 (2d Cir. 1940) (per curiam) ("It must be remembered that, while there are an enormous number of possible permutations of the musical notes of the scale, only a few are pleasing; and much fewer still suit the infantile demands of the popular ear. Recurrence is not therefore an inevitable badge of plagiarism.").

212. *Skidmore*, 952 F.3d at 1066–69 (identifying relevant cases).

213. *Id.* at 1066 (quoting Rentmeester v. Nike, Inc., 883 F.3d 1111, 1124 (9th Cir. 2018)).

214. *Id.* at 1066, 1068.

215. *Id.* at 1068.

216. *Id.*

217. *Id.* at 1069.

As both *Williams v. Gaye* and *Skidmore v. Led Zeppelin* illustrate, the current copyright infringement jurisprudence as applied to popular music represents a push-and-pull between protecting an author's creative expression while ensuring only that expression is being protected—not the underlying ideas. What remains to be seen is how courts will respond to copyright litigation concerning AI-generated musical works. Part III highlights the importance of protecting human authorship and provides suggestions for how courts can do so in the age of Generative A.I.

III. ADAPTING MUSIC COPYRIGHT INFRINGEMENT DOCTRINE TO PROTECT HUMAN AUTHORSHIP

The creative act of composing music is "among the core of activities that define what it means to be human."[218] To that end, "[w]hen new technology platforms threaten the economic infrastructure supporting creative expression, copyright law seeks to protect the system that supports the creative arts."[219] If acts of creation are indeed part-and-parcel to the human experience and copyright law seeks to support the creative arts, then it stands to reason that there should be stronger protections for works of human authorship against works of Generative A.I. because only works of human authorship can satisfy the de minimis level of creativity required for copyright protection. The following Subparts advocate for the revival of the inverse ratio rule and the removal of the fair use defense to protect human authorship from Generative A.I. infringement.

A. PRESUMPTION OF ACCESS & REVIVAL OF THE INVERSE RATIO RULE

There should be a rebuttable presumption of access applied specifically to music copyright infringement lawsuits concerning A.I.-generated musical works because of how easily Generative A.I. models access content online. If the plaintiff can show that their musical work exists on a digital platform, like Spotify, Apple Music, SoundCloud, or YouTube, then courts should assume that Generative A.I. has access to the work.[220] However, the presumption is rebuttable if a defendant can show that the Generative A.I. model at issue did not access the plaintiff's work.

In turn, the inverse ratio rule, which presumes that a high level of access is indicative of copying, should be revived at the summary judgment stage for music copyright infringement involving A.I.-generated musical works. The Ninth Circuit was wrong to use *Skidmore* to abrogate the inverse ratio rule from its jurisprudence.[221] The unique problems the court cited regarding the digital

218. Mammen & Richey, *supra* note 44, at 276.

219. Brief for Professors Peter S. Menell, David Nimmer, Robert P. Merges & Justin Hughes as Amici Curiae Supporting Petitioners, Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005) (No. 04-480).

220. This formulation also falls within the theory of widespread dissemination. *See* Livingston & Urbinato, *supra* note 66, at 266.

221. *See supra* Part II.B.

world and the concept of access are *precisely* why the inverse ratio rule should be revived for the age of Generative A.I. because this technology poses such a strong threat to human creativity by its ability to access all copyrighted works that are available online.

It is also important to note showing access is only a sub-element of the first part of a copyright infringement analysis. The plaintiff would still need to make at least a minimal showing of probative similarity. If a court then determines that copying occurred via the presumption of access and a showing of probative similarity, then the works go to the ordinary listener—usually, members of the jury—to determine whether an ordinary listener would recognize the copying. Only then does the question of whether the works are substantially similar arise. At most, this presumption of access and revival of the inverse ratio rule would likely help a plaintiff survive a motion for summary judgment, allowing a jury to determine whether there was unlawful appropriation and, ultimately, whether there was infringement. And again, this Note only advocates for the revival of the inverse ratio rule for a narrow area of copyright law: music copyright infringement lawsuits concerning the infringement of A.I.-generated musical works.

B. BAR THE FAIR USE DEFENSE

Much of the scholarship concerning the fair use defense and its applicability to generative A.I. focuses on the input, meaning that machine learning based on copyright material should be considered fair use. However, the output should not be because A.I.-generated works, and particularly musical works, will essentially be derivative works of the copyrighted works. This level of substantial substitution will mean that A.I.-generated musical works are not transformative.

To that end, this Note proposes that the fair use defense should be abrogated from music copyright infringement lawsuits against A.I.-generated musical works, meaning that A.I.-generated musical works should never be considered a fair use. Because the purpose and character of the use of an A.I.-generated musical work will likely not be a transformative use anyway, a fair defense would likely fail on the first factor of the statutory test.[222] Not only that, but because the use is likely more substitutive than transformative,[223] the use would likely hurt "the potential market for or value of the copyright [musical] work" under the fourth factor.[224] Given that fair use analysis is complicated as it is, removing it from this specific subset of cases would help plaintiffs better protect their works of human authorship against Generative A.I.

222. 17 U.S.C. § 107(1).
223. *See* Lemley & Casey, *supra* note 29, at 778.
224. 17 U.S.C. § 107(4).

CONCLUSION

Generative A.I. is a threat to songwriters, composers, performers, and the music industry as a whole. While Generative A.I. could be conceived as merely another set of tools for creation, it will harm human artists. Our laws must find a way to catch up with the ever-expanding digital, technological world because music copyright infringement and the test of substantial similarity will not protect human musical artists against Generative A.I. infringement. While bringing back the inverse ratio rule and abrogating the fair use defense for these specific cases are controversial ideas, both would help plaintiffs protect their work against Generative A.I. infringement, which is a paramount concern because creating and appreciating art, particularly music, is essential to our humanity.