"FAKE DRAKE": VINDICATING COPYRIGHT OWNERSHIP IN THE ADVENT OF GENERATIVE AI MUSIC

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INTRODUCTION

In April 2023, "Heart on My Sleeve" almost instantly went viral on TikTok, grabbing the attention of millions of viewers who were intrigued by what seemed to be an unreleased collaboration between Drake and The Weeknd.[1] The song not only sounded extremely similar to its alleged vocalists and their music styles, but the lyrics also reflected events and people relevant to their lives, resulting in a very convincing piece of music. But it quickly became clear that this song was not, in fact, created nor sung by Drake and The Weeknd; instead, it was the product of artificial intelligence ("AI") music-generating programs used by Ghostwriter977, the poster of the video.[2] After amassing millions of views across various platforms in just a few days, streaming services pulled the song,[3] and those searching for it on YouTube were met with a message stating the video was "no longer available due to a copyright claim by Universal Music Group."[4]

While concerns about this particular song seem to have been adequately addressed by streaming services quickly pulling it from their platforms, the

1. Amanda Silberling, *A New Drake x The Weeknd Track Just Blew Up—But It's an AI Fake*, TECHCRUNCH (Apr. 17, 2023, 9:41 AM), https://techcrunch.com/2023/04/17/uh-oh-an-ai-generated-song-by-drake-and-the-weeknd-went-viral [https://perma.cc/ZAT6-6DG6].

2. Samantha Murphy Kelly, *The Viral New 'Drake' and 'Weeknd' Song Is Not What It Seems*, CNN (Apr. 19, 2023, 9:14 AM), https://www.cnn.com/2023/04/19/tech/heart-on-sleeve-ai-drake-weeknd [https://perma.cc/6DWJ-6E5A].

3. The original video of the song posted to TikTok was also seemingly deleted. *Id.*

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 [https://perma.cc/4YG9-G49J]. Despite the message displayed, Universal Music Group ("UMG") declined at that time to clarify whether it had formally sent takedown requests. Laura Snapes, *AI Song Featuring Fake Drake and Weeknd Vocals Pulled from Streaming Services*, GUARDIAN (Apr. 18, 2023, 5:37 PM), https://www.theguardian.com/music/2023/apr/18/ai-song-featuring-fake-drake-and-weeknd-vocals-pulled-from-streaming-services [https://perma.cc/MNZ3-ZWGG].

impact of Ghostwriter977's video was profound and widespread. While generative AI had already aroused questions and concerns generally, [5] "Heart on My Sleeve" directed the world's attention to the music context. While this is not the first instance of a controversial AI-generated musical work,[6] the nature and quality of the song revealed just how advanced generative AI technology has become, sparking strong responses ranging from excited curiosity to extreme outrage.[7]

The key question that the world is now more intently wondering, as artists, labels, and music representatives wave the flag of "copyright infringement," is whether U.S. copyright law, as it stands today, can be a source of recourse for artists to take legal action in response to AI-generated music. Due to the novelty of the technology and the nuances of copyright law in the music context, we are without the legal precedent one would usually look at to find a more definitive answer. Because copyright holders' concerns are pressing and nothing suggests that copyright law will soon be amended to address them, analogizing to similar cases and drawing on the fundamental principles of, and rationales for, copyright protection is necessary to develop predictions as to how courts will rule in a copyright case of *Artist v. AI User*.

5. *See, e.g.*, Abreanna Blose, *As ChatGPT Enters the Classroom, Teachers Weigh Pros and Cons*, NEATODAY (Apr. 12, 2023), https://www.nea.org/nea-today/all-news-articles/chatgpt-enters-classroom-teachers-weigh-pros-and-cons [https://perma.cc/35P7-LB4S] ("On the one hand, many educators fear [ChatGPT] . . . encourag[es] new methods of cheating and plagiarism. . . . On the other, [it] . . . appeal[s] to educators who see its potential to improve education."); Benj Edwards, *Artists File Class-Action Lawsuit Against AI Image Generator Companies*, ARS TECHNICA (Jan. 16, 2023, 3:36 PM), https://arstechnica.com/information-technology/2023/01/artists-file-class-action-lawsuit-against-ai-image-generator-companies [https://perma.cc/5FNU-TLHW] ("Since the mainstream emergence of AI image synthesis in the last year, AI-generated artwork has been highly controversial among artists . . . .").

6. *See, e.g.*, Sonia Horon, *Drake Responds to AI-Generated Cover of Him Rapping Ice Spice's Hit Song Munch and Calls It 'The Final Straw'*, DAILY MAIL (Apr. 14, 2023, 7:31 PM), https://www.dailymail.co.uk/tvshowbiz/article-11974861/Drake-calls-AI-Generated-cover-rapping-Ice-Spices-song-Munch-final-straw.html [https://perma.cc/FRA4-Q96J] ("Drake appeared less than pleased with a recent AI-Generated cover of him rapping Ice Spice's hit song Munch."); Jem Aswad, *AI and Copyright: Human Artistry Campaign Launches to Support Songwriters and Musicians' Rights*, VARIETY (Mar. 17, 2023, 7:17 AM), https://variety.com/2023/music/news/ai-copyright-human-artistry-campaign-musicians-songwriters-artificial-intelligence-1235557582 [https://perma.cc/79QD-WR6V] (noting that the "music industry is alarmed" following instances like David Guetta's song using an AI-generated Eminem track).

7. Singer-songwriter Grimes posted on X, in response to "Heart on My Sleeve," that she would "split 50% [of] royalties on any successful AI generated song that uses [her] voice," noting, in a reply to her initial post, that she thinks "it's cool to be fused w[ith] a machine." Grimes (@Grimezsz), X (Apr. 23, 2023, 6:02 PM), https://x.com/Grimezsz/status/1650304051718791170 [https://perma.cc/X5Q7-8VJV]. A more cautious John Legend conceded that "AI's going to be a part of our lives, . . . [a]nd that's fine," but he believes artists' "rights should still be protected." Daniella Genovese, *John Legend Calls for Regulation on AI-Generated Music*, FOX BUS. (Apr. 27, 2023, 9:07 AM), https://www.foxbusiness.com/lifestyle/john-legend-calls-regulation-ai-generated-music [https://perma.cc/SF9C-ZD7H].

Copyright is concerned with protecting the rights of creators and encouraging innovation, meaning that there remains an additional concern about being overly restrictive and inhibiting creativity and progress. In the context of AI-generated music and copyright infringement, we are placed at what some deem a crossroads,[8] left to decide whether we value human artists' creativity and resulting work more or less than we value technological innovation and its potential for important advancements. On one side of this policy debate is the music industry, which generated $15.9 billion in revenue in 2022 in the United States alone,[9] and represents an art form that has brought humans together since the beginning of time. There is a high barrier to achieving conventional success in the music industry, which some interpret to mean that only the very best succeed as a result of their hard work and dedication. But the other side of the debate takes these same ideas to highlight how innovative generative AI music should be encouraged. Unlike the music industry, which is extremely difficult to break into, there is a very low barrier to entry for generative AI use, as it is largely accessible and there are many tools one can use to learn how to harness the technology.[10] Some see this as an opportunity to diversify music and the people making it, which has many benefits. There are strong opinions on both sides, placing this debate squarely within the realm of what legislators anticipated would be a subject of copyright controversy—how can we balance protecting existing creations and encouraging future innovations? [11]

Absent both a clear answer to this question and any indications that existing copyright law will soon be amended to specifically address the issue of potential copyright infringement by generative AI music outputs, we must look to the interpretation of current copyright law in similar situations. This Note will use case law to shed light on how courts might treat copyright infringement suits involving AI-generated music. To illustrate how current copyright law will apply to real AI-generated music, two hypothetical songs

8. A spokesperson for UMG asked, "which side of history [do] all stakeholders in the music ecosystem want to be on: the side of artists, fans and human creative expression, or on the side of . . . fraud and denying artists their due compensation"? Snapes, *supra* note 4.

9. Jem Aswad, *U.S. Recorded Music Revenue Scores All-Time High of $15.9 Billion in 2022, Per RIAA Report*, VARIETY (Mar. 9, 2023, 5:57 AM), https://variety.com/2023/music/news/riaa-2022-report-revenue-all-time-high-15-billion-1235547400 [https://perma.cc/A9AT-YV9E].

10. Ziv Epstein, Aaron Hertzmann, the Investigators of Human Creativity, Memo Akten, Hany Farid, Jessica Fjeld, Morgan R. Frank, Matthew Groh, Laura Herman, Neil Leach, Robert Mahari, Alex "Sandy" Pentland, Olga Russakovsky, Hope Schroeder & Amy Smith, *Art and the Science of Generative AI*, 380 SCI. 1110, 1110 (2023).

11. Artificial Intelligence and Intellectual Property—Part II: Copyright: Hearing Before the Subcomm. of Intell. Prop. of the S. Comm. on the Judiciary, 118th Cong. 2 (2023) (statement of Sen. Christopher A. Coons) ("We should also consider whether changes to our copyright laws . . . may be necessary to strike the right balance between creators' rights and AI's ability to enhance innovation and creativity.").

will be used as examples, both based on songs that could be created using existing generative AI music systems.[12]

Sample Song A is a rap song created by User A using Uberduck.ai ("Uberduck"). Sample Song A was created using a generic punk rap beat provided by Uberduck. The voice used to create Sample Song A is an option specifically labeled as Kanye West in the era of *Yeezus*, West's provocative 2013 album. The lyrics are generated by Uberduck, using the prompt "rebellion, slavery, superiority, unapologetic, perseverance, individuality, and power," all of which are words that have been used to describe West's reputation, as well as the themes of *Yeezus* and particularly, the hit song "Black Skinhead."[13] The resulting rap sounds nearly identical to West, with lyrics closely tied to themes he has focused on. The unsuspecting listener may very likely mistake the song for a new release by West himself. While the song sounds like it would fit in with West's discography, the actual music and lyrics are completely different from any of his prior releases.

Sample Song B is an emotional ballad, and User B created the musical composition using MuseNet. In creating Sample Song B, they selected Adele as the vocal style for the song, and the selected instrument was limited to piano. The introduction to Sample Song B uses the well-known piano phrase that functions as a melodic hook throughout Adele's "Someone Like You," an option provided by MuseNet. This piano segment is arguably the most distinctive musical feature of "Someone Like You," and is known as an arpeggio, which melodizes chords.[14] The exact piano chords and resulting melody are used—just slightly sped up—but after the introduction, the chords begin to differ. However, the song returns to the piano phrase after the chorus, resulting in a song that is musically similar to "Someone Like You." User B added lyrics using an outside platform after MuseNet finalized the composition. Sample Song B's lyrics were written to evoke feelings of both love and despair, and the words themselves speak to a failed relationship, regret, and a longing for love; thus, the song, both lyrically and musically, bears a notable resemblance to "Someone Like You" and Adele's

12. MuseNet, one of the AI systems that will be used, is not currently functional. However, there is significantly more information available about MuseNet than comparable platforms, and it uses modeling similar to other operating platforms which means this application will be generalizable to similar modeling systems.

13. Mark Chinapen, *Yeezus by Kanye West Retrospective—The Anti-Rap Album*, MEDIUM (Jan. 29, 2021), https://medium.com/modern-music-analysis/yeezus-by-kanye-west-retrospective-the-anti-rap-album-39d57d618723 [https://perma.cc/HG57-JZVL]; James McNally, *Review: Yeezus by Kanye West*, ETHNOMUSICOLOGY REV. (July 14, 2013), https://ethnomusicologyreview.ucla.edu/content/review-yeezus-kanye-west [https://perma.cc/4TGF-XH4L].

14. *Arpeggio*, GW LAW: MUSIC COPYRIGHT INFRINGEMENT RESOURCE, https://blogs.law.gwu.edu/mcir/2018/12/20/arpeggio [https://perma.cc/ES9C-RV2L].

music generally.[15] The lyrics are sung in a feminine, mezzo-soprano voice, but unlike Sample Song A, the voice does not directly imitate its style inspiration.

Before applying copyright law to the sample songs, this Note provides relevant background information. Part I introduces generative AI, providing an overview of how the technology works and details on how the systems used to make the sample songs produce musical works. Additionally, the U.S. Copyright Office's statements about AI are discussed. Part II focuses on current copyright law—what it requires, what it protects, and how infringement actions work. Music occupies a unique area of copyright law because of the separation between the composition and the sound recording, so limitations and exclusions are discussed in detail. Because courts have not specifically addressed AI on many occasions, analogizing to other cases involving technology helps anticipate the judicial response to this novel technology. Part III applies copyright law to the sample songs and predicts likely outcomes. This includes an analysis of how the songs may fare in all steps of an infringement action, from defenses to statutorily imposed limitations on what can be the basis of a lawsuit. This analysis reveals how copyright law might help artists and how it may hurt them. While artists may potentially find support in trademark law or the right of publicity, this Note will focus solely on copyright law as a vehicle for attempting to vindicate their rights. Finally, Part IV discusses policy implications associated with trying to fit AI-generated music into our developed system of copyright law, highlights the key concerns for artists, and points to gray areas that warrant clarification. The conclusion of this Note summarizes anticipated outcomes and the complicated nature of fitting new technology into the current framework of copyright law.

15. Kitty Empire, *Adele: 21—Review*, GUARDIAN (Jan. 22, 2011, 7:05 PM), https://www.theguardian.com/music/2011/jan/23/adele-adkins-21-review [https://perma.cc/3W55-NMDN]; Doug Waterman, *The Story Behind the Song: Adele, "Someone Like You"*, AM. SONGWRITER (Oct. 12, 2021, 12:59 PM), https://americansongwriter.com/someone-like-you-adele-behind-the-song [https://perma.cc/GN6Q-L4GA]; Michaeleen Doucleff, *Anatomy of a Tear-Jerker*, WALL ST. J. (Feb. 11, 2012), https://www.wsj.com/articles/SB10001424052970203646004577213010291701378 [https://perma.cc/4T3Z-AAJZ].

I. BACKGROUND: GENERATIVE ARTIFICIAL INTELLIGENCE

A. HOW THE TECHNOLOGY WORKS

AI is "a science and a set of computational techniques that are inspired by the way in which human beings use their nervous system and their body to feel, learn, reason, and act."[16] More simply, AI can be thought of as "a man-made object with thinking power."[17] At the foundation of any program is data input, a starting point akin to the intaking of information that constitutes the first step of the human learning process; the difference between AI and human learning in this respect, however, is that AI systems require massive amounts of data to be effective.[18] How exactly systems use data and produce desired results depends on the learning approach. The most prominent systems are machine learning ("ML") and deep learning ("DL").

ML is the "most promising and most relevant domain" to apply AI.[19] ML is a way of learning from big data, and its algorithm is self-adaptive, meaning that through experience, it can get new patterns and improve "perception, knowledge, decisions, or actions."[20] The key feature that distinguishes ML is that the goal is for the algorithm to learn to find its own solutions, as opposed to learning to follow human-defined rules.[21] DL uses "large multi-layer (artificial) neural networks"[22] ("ANNs") to carry out tasks. [23] DL algorithms "filter[] the input through many layers," resulting in the ability to "classify and predict the data."[24] "Computational nodes" are created and trained, and ultimately make decisions through a filtering process that is similar to the human brain.[25]

16. Pradeep Kumar Garg, *Overview of Artificial Intelligence*, *in* ARTIFICIAL INTELLIGENCE: TECHNOLOGIES, APPLICATIONS, AND CHALLENGES 3, 3 (Lavanya Sharma & Pradeep Kumar Garg, eds., 2022) (citation omitted).

17. This meaning can be derived from the root words of artificial intelligence: "artificial" means "human-created" and "intelligence" means "thinking power." *Id.*

18. *Id.*

19. R. Lalitha, *AI vs. Machine Learning vs. Deep Learning*, *in* ARTIFICIAL INTELLIGENCE (AI): RECENT TRENDS AND APPLICATIONS 73, 75 (S. Kanimozhi Suguna, M. Dhivya & Sara Paiva, eds., 2021).

20. *Id.*; Christopher Manning, *Artificial Intelligence Definitions*, STANFORD UNIVERSITY: HUMAN-CENTERED A.I. (Apr. 2022), https://hai.stanford.edu/sites/default/files/2023-03/AI-Key-Terms-Glossary-Definition.pdf [https://perma.cc/5SZ9-V94M].

21. Garg, *supra* note 16, at 9; Philip Boucher, *Artificial Intelligence: How Does It Work, Why Does It Matter, and What Can We Do About It?*, EUR. PARL. RSCH. SERVS. VII (2020).

22. Manning, *supra* note 20.

23. Boucher, *supra* note 21, at VI ("Artificial neural networks process data to make decisions in a way that is inspired by the structure and functionality of the human brain.").

24. Lalitha, *supra* note 19, at 76.

25. *Id.* ("It is exactly similar to how the human brain filters any information into deep layers to understand in depth.").

This Note will focus specifically on generative AI applications, which are created using generative modeling.[26] Generative AI models have a "machine learning architecture" and use learned patterns to generate new data samples.[27] There are various generative AI systems, each tailored to a desired output goal; for example, ChatGPT is a generative AI system that generates text and is based on an "X-to-text" model.[28] Because generative AI is a subset of ML, the training process requires substantial amounts of data. How models are trained can vary greatly, so this Note will focus on the training used for the specific systems that generate music.

B. GENERATIVE AI IN THE MUSIC CONTEXT

There are important nuances to note when discussing generative AI systems that create music as opposed to other output domains. Systems that generate music have attracted a lot of attention purely because the output is something we have long considered to be an "innate pursuit of human beings," as music is viewed as a human expression that encompasses both "creativity" and "collaboration."[29] While many people remain very opposed to generative AI music,[30] it is undeniable that the technology has advanced rapidly in ways that have vastly improved the output quality; many generative AI music systems are now able to account for the subtle but important nuances in recorded music and generate output accordingly.[31]

Most music-generating systems involve combinations of ML, DL, and ANNs. The sample songs guiding this Note's application of copyright law to AI-generated music used the following two noteworthy systems: Uberduck.ai and MuseNet, both of which exist on different ends of the technology spectrum. While these systems are different in relevant ways that will be discussed, it is important to note a key similarity is that they are trained on existing music, so it is almost guaranteed that at least some of the

26. Stefan Feuerriegel, Jochen Hartmann, Christian Janiesch & Patrick Zschech, *Generative AI*, 66 BUS. & INFO. SYS. ENG'G 111, 112 (2024) ("[G]enerative modeling aims to infer some actual data distribution . . . [and] [b]y doing so, a generative model offers the ability to produce new synthetic samples.").

27. *Id.*

28. *Id.*

29. Weiming Liu, *Literature Survey of Multi-Track Music Generation Model Based on Generative Confrontation Network in Intelligent Composition*, 79 J. SUPERCOMPUTING 6560, 6561 (2022).

30. In response to an AI-generated song intended to be in the style of his music, singer and songwriter Nick Cave stated that the song was "bullshit, a grotesque mockery of what it is to be human." Sian Cain, *'This Song Sucks': Nick Cave Responds to ChatGPT Song Written in Style of Nick Cave*, GUARDIAN (Jan. 16, 2023, 7:39 PM), https://www.theguardian.com/music/2023/jan/17/this-song-sucks-nick-cave-responds-to-chatgpt-song-written-in-style-of-nick-cave [https://perma.cc/JJ4E-8L4T].

31. Eric Sunray, Note, Sounds of Science: *Copyright Infringement in AI Music Generator Outputs*, 29 CATH. U. J.L. & TECH. 185, 192–93 (2021).

input includes copyrighted songs that train the model to invoke a sound or style.

Uberduck, used for Sample Song A, is a speech synthesis system powered by DL that generates "high-quality and expressive voice output."[32] Uberduck utilizes several models for speech synthesis, including SO-VITS-SVC, HiFi-GAN, and other text-to-speech models.[33] SO-VITS-SVC is a DL model, trained using audio files to convert recordings into singing voices.[34] SO-VITS-SVC references "SoftVC," "[c]onditional [v]ariational [a]utoencoder with [a]dversarial [l]earning," and "singing voice conversion."[35] Using a source audio, SoftVC, or "soft voice conversion" separates a singer's voice into "frequency bands," which are encoded to analyze "distinct characteristics" of a voice.[36] A conditional variational autoencoder with adversarial learning uses adversarial training aimed at enabling text-to-speech models to handle more varied data.[37] Lastly, singing voice conversion, which can be thought of like a voice cloner, converts one singing voice into another while maintaining features like pitch, rhythm, and notes from the original input.[38] Uberduck also uses HiFi-GAN, which is a specialized variant of the generative model Generative Adversarial Network ("GAN").[39] GANs use generators and discriminators, which work together in a repeated feedback process to help the generator produce results that pass the discriminator's authenticity test.[40] The discriminator is trained to determine whether an audio sample is real or fake, which aids the generator in "better approximat[ing] the distribution of real data," resulting in more realistic-sounding outputs.[41] Through its "loss function," the generator improves its output by incorporating feedback from the error in results,

32. *UberDuck*, WELCOME.AI, https://welcome.ai/solution/uberduck [https://perma.cc/4KUC-376P].

33. *Id.* Other models include Tacotron 2 and zero-shot RADTTS. *Id.*

34. Matt Mullen, *How to Make an AI Cover Song with Any Artist's Voice*, MUSICRADAR (Nov. 28, 2023), https://www.musicradar.com/how-to/ai-vocal-covers [https://perma.cc/AWG2-L2JD].

35. Amal Tyagi, *How to Turn Your Voice into Any Celebrity's (so-vits-svc 4.0)*, MEDIUM (May 17, 2023), https://medium.com/@amaltyagi/how-to-turn-your-voice-into-any-celebritys-so-vits-svc-4-0-e92222a287e2 [https://perma.cc/W3EM-S3S4].

36. *Id.*; Benj Edwards, *Hear Elvis Sing* Baby Got Back *Using AI—and Learn How It Was Made*, ARS TECHNICA (Aug. 4, 2023, 8:32 AM), https://arstechnica.com/information-technology/2023/08/hear-elvis-sing-baby-got-back-using-ai-and-learn-how-it-was-made [https://perma.cc/EBP5-LMJ5].

37. Tyagi, *supra* note 35.

38. *Id.*; *What Is SVC Technology?*, VOICE.AI (May 10, 2023), https://voice.ai/hub/voice-technology/svc-technology [https://perma.cc/24JZ-F954].

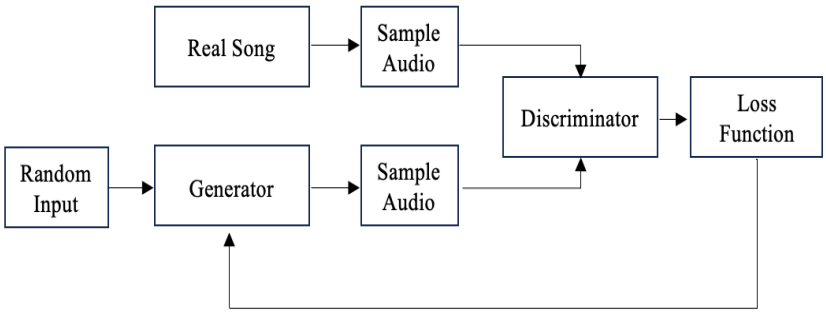
39. Jiaqi Su, Zeyu Jin & Adam Finkelstein, *HiFi-GAN: High-Fidelity Denoising and Dereverberation Based on Speech Deep Features in Adversarial Networks*, 2020 INTERSPEECH 4506, 4506 (2020); K. Rakesh and V. Uma, *Generative Adversarial Network: Concepts, Variants, and Applications*, *in* ARTIFICIAL INTELLIGENCE (AI): RECENT TRENDS AND APPLICATIONS 131, 132 (S. Kanimozhi Suguna et al. eds., 2021).

40. Sunray, *supra* note 31, at 189.

41. Su et al., *supra* note 39, at 1.

which is the difference between actual and predicted outputs.[42] This process is illustrated in Figure 1 below. The difference with HiFi-GAN, specifically, is that it is tailored to "transform recorded speech to sound as though it had been recorded in a studio."[43] The use of HiFi-GAN is an important component of making the resulting song sound believable. Together, these technologies and the other text-to-speech models work to mimic the voice of an input audio and make it sound as authentic as possible.

FIGURE 1. The HiFi-GAN Process

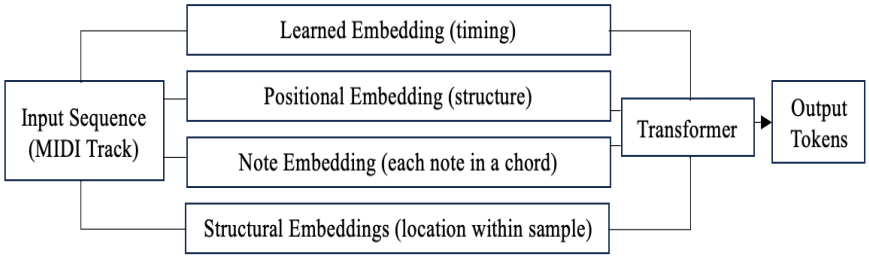


While both systems use DL, MuseNet, used for Sample Song B, is not a text-to-speech system, and is instead a music composition generator that uses a transformer model, which is illustrated in Figure 2 below. MuseNet uses MIDI files encompassing a wide variety of musical styles as its training data.[44] In training the system, sequential data is provided in the form of sets of notes, and it is asked to predict what the next note will be.[45] Data is encoded in a way that "combines expressivity with conciseness."[46] Similar to the adversarial elements of Uberduck, MuseNet has an "inner critic" during training which asks the model if a sample was generated by the model

42. *Id.*
43. *Id.*
44. Christine Payne, *MuseNet*, OPENAI (Apr. 25, 2019), https://openai.com/index/musenet [https://perma.cc/2WBS-4T88]. MIDI files, unlike conventional audio files, contain information on the notes and how those notes are to be played, which allows the model to "extract patterns in the way notes are played, with what instruments, and for how long." Raghav Srinivasan, *MuseNet and the Future of AI*, MEDIUM (Mar. 31, 2021), https://raghav-srinivasan.medium.com/musenet-and-the-future-of-ai-f0a971fc6ed7 [https://perma.cc/XYA9-NF88].
45. Payne, *supra* note 44.
46. *Id.*

or from the dataset.[47] Additionally, MuseNet created composer and instrumentation tokens which are used during training to teach the model to utilize such information when making predictions; the result is that the model can be conditioned to generate output in a certain style using prompts.[48] Essentially, MuseNet uses the music styles and MIDI files it has been trained on to generate note sequences that sound realistic, as if human-generated.[49]

FIGURE 2. Transformer Model Training



With the internal side of the technology having been established, the next component is the user side. When using Uberduck—specifically the "AI Generated Rap" feature used to create Sample Song A—the user is able to select a beat from a list of premade generic beats.[50] After that is chosen, users have a choice to input custom lyrics or utilize Uberduck's AI lyric generator, which requires entering a detailed "description of what you want your rap to be about."[51] Finally, the user selects an artist from a list of "[r]appers" to be the voice of their song.[52] The end result is a complete rap song. As for MuseNet, the initial prompts include style, introduction, instruments, and number of tokens.[53] Style options range from Mozart to Lady Gaga to

47. *Id.*
48. *Id.*
49. Srinivasan, *supra* note 44.
50. *AI Generated Rap Beat*, UBERDUCK, https://www.uberduck.ai/app/rap#beat [https://perma.cc/3TPM-RVHG]. The other options are simpler "Text to Voice" and "Voice to Voice" features. *Id.*
51. *Id.*
52. *Id.* Users are also able to use their own voice, but that is not relevant to this discussion since there would likely not be anything to point to in the output as infringing if the lyrics are original and one's own voice is the basis of the audio. Uberduck's interface has since changed, but previously certain artists had several options, indicating different eras of their music.
53. Devin Coldewey, *MuseNet Generates Original Songs in Seconds, from Bollywood to Bach (or Both)*, TECHCRUNCH (Apr. 25, 2019, 1:31 PM), https://techcrunch.com/2019/04/25/musenet-generates-original-songs-in-seconds-from-bollywood-to-bach-or-both [https://perma.cc/Z78E-QWS9].

Disney.[54] Similarly, the introduction options cover a wide range, including the intro from "Someone Like You" by Adele, which is used in Sample Song B.[55] The number of tokens used corresponds to the length of the song. The end product is a musical composition, to which lyrics can be added outside the platform.[56]

C. COPYRIGHT OFFICE ON AI

In August 2023, the U.S. Copyright Office ("Office") published a notice of inquiry on copyright and AI, which followed the March 2023 launch of the Office's AI Initiative.[57] This inquiry specifically focused on policy issues relating to copyrighted works being used to train models, the copyrightability of AI-generated works, potential liability for AI-generated work that infringes on a copyright, and how to treat AI-generated works that imitate artists.[58] In July 2024, the Office published Part 1 of the Report on Copyright and Artificial Intelligence ("Report"), which addresses the topic of digital replicas.[59] Specifically referencing "Heart on My Sleeve," the Office ultimately concluded that it believes the time has come for a new federal law to address unauthorized digital replicas.[60] With respect to copyright law specifically, the Office broadly indicated that a victim of a digital replica in the form of a musical work may have a claim for infringement of the copyrighted work, but clarified that a replica of one's voice alone does not seem to constitute copyright infringement.[61] Because Part 1 of the Report provides little insight with respect to the potential vitality of such copyright claims and primarily focuses on legislative suggestions, the Office's previous statements and approaches in similar technology-related contexts remain potentially revelatory.

54. *Id.*; Payne, *supra* note 44.

55. Coldewey, *supra* note 53.

56. This can be done through simple applications, such as GarageBand, or more advanced technology like that used in a professional music studio. An interesting note that could be studied in the future is that, theoretically, lyrics could be generated in the voice of an artist using a system like Uberduck and added to a composition from a system like MuseNet utilizing an outside application. While the result may sound disjointed or unnatural, it may raise interesting copyright or trademark issues with regard to the interaction of vocal style, musical style, and potential fragmented literal similarity with regard to the music.

57. Notice of Inquiry, 88 Fed. Reg. 59942 (Aug. 30, 2023).

58. *Id.* at 59945.

59. *See generally* U.S. COPYRIGHT OFF., COPYRIGHT AND ARTIFICIAL INTELLIGENCE PART 1: DIGITAL REPLICAS (2024).

60. *Id.* at 7. It is of note that the U.S. Copyright Office ("Office") uses the term "digital replicas" to refer to "video[s], image[s], or audio recording[s] that [have] been digitally created or manipulated to realistically but falsely depict an individual," and uses the term "deepfake" interchangeably. *Id.* at 2.

61. *Id.* at 17.

While this inquiry is the Office's most comprehensive look into AI, it is not the first time it has addressed AI. The Office addressed concerns about technology-generated works in 1965, especially after receiving an application for registration of a "musical composition created by a computer."[62] Although the issues posed by AI today are, in many respects, far more complex given the vast technological advancements in recent years, the general questions about how non-human-generated works fit or do not fit into copyright have been pondered for nearly six decades. The Office, in operating a copyright registration system, necessarily adjusts its practices according to shifts in technology.[63] In deciding whether to register a claim, a "registration specialist" is tasked with determining whether a work qualifies as copyrightable subject matter and satisfies the formal and legal requirements of the copyright statutes and the Office's practices.[64] As such, the Office's practices regarding what is registered generally reflect contemporary understandings of the scope of copyright law in light of modern developments.

The question of copyright protection for AI-generated works has notably been addressed in three recent situations. The first situation, which ripened into litigation, involved the Office's denial of registration for "A Recent Entrance to Paradise," an artwork created by an AI system, the "Creativity Machine," which was listed as the author. The Office cited the lack of human authorship as its basis for denial, a requirement that derives from the statutory criteria that protection is extended only to "original works of authorship."[65] While "original work of authorship" is not defined statutorily, courts have uniformly interpreted it to limit protection to human authors,[66] and the Office has adhered to that.[67] The Office also rejected the argument that AI can be an author under a "work-for-hire" theory.[68] The user challenged the denial as an "arbitrary, capricious, . . . abuse of discretion . . . not in accordance with the law, . . . and in excess of [the

62. U.S. COPYRIGHT OFF., 68TH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 4–5 (1966).

63. *Oversight of the U.S. Copyright Office: Hearing Before the Subcomm. on Cts., Intell. Prop. & the Internet of the H. Comm. on the Judiciary*, 113th Cong. 4 (2014) (statement of Maria A. Pallante, Register of Copyrights and Director of the U.S. Copyright Office).

64. U.S. COPYRIGHT OFF., COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 206 (3d ed. 2021).

65. Letter from U.S. Copyright Off. Rev. Bd. to Ryan Abbott, Esq., at 2–3 (Feb. 14, 2022); 17 U.S.C. § 102.

66. *See* Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 61 (1884) (using the words "man" and "person" to describe an author); Goldstein v. California, 412 U.S. 546, 561 (1973) (describing an author as an "individual"); Kelley v. Chi. Park Dist., 635 F.3d 290, 304 (7th Cir. 2011) ("[A]uthorship is an entirely human endeavor." (citation omitted)).

67. U.S. COPYRIGHT OFF., *supra* note 64, at § 306.

68. U.S. Copyright Off. Rev. Bd., *supra* note 65, at 6–7 (explaining that an AI system cannot enter into a contract).

Office's] statutory authority."[69] The court upheld the denial, stating the lack of human involvement pointed to the "clear and straightforward answer" that it does not give rise to copyright.[70] This situation differs from a second scenario in which the Office registered "Zarya of the Dawn," a comic book created using an AI system known as Midjourney.[71] The images in the book were created by Midjourney in response to the user's text prompts, but the user did not control the creation process; as such, the images themselves were not protectable based on the human authorship requirement, so copyright extended only to the text she wrote herself and the selection and arrangement of the elements of the book, including the images.[72] The third situation involved the denial of copyright registration for an AI-generated artwork entitled "Théâtre D'opéra Spatial" based on the Office's conclusion that it contained "more than a *de minimis* amount of content generated by [AI]."[73] The Office offered to register the work if the user would exclude AI-generated features, as there were some elements of human creation, but he refused and challenged that requirement; nonetheless, the Office stood by the requirement of disclosing AI-generation.[74]

Due to situations like these,[75] the Office clarified how AI-generated works are examined and registered in a recent statement.[76] In the statement, the Office explains that in making registration decisions about works created using AI, the first question is whether the work is "basically one of human authorship, with the computer [or other device] merely being an assisting instrument," or if a machine conceived and executed the traditional elements of human authorship.[77] The Office notes that when AI systems receive prompts from humans that enable the generation of "complex . . . musical works," the author is the technology, not the prompt-writing human, so it would not be registered.[78] The Office states that there are cases in which AI

69. Thaler v. Perlmutter, 687 F. Supp. 3d 140, 144 (D.D.C. 2023).

70. *Id.* at 146–47, 150 (describing the human authorship requirement as a "bedrock requirement of copyright," following from the statutory text that limits protection to "original works of authorship"). The court did not address the plaintiff's theories of ownership but mentioned that "doctrines of property transfer cannot be implicated where no property right exists to transfer in the first instance," and the "work-for-hire provisions of the Copyright Act" similarly presume that there is an existing right that can be claimed. *Id.*

71. Letter from U.S. Copyright Off. to Van Lindberg 1–2 (Feb. 21, 2023).

72. *Id.* at 6–12. The registration of the work explicitly excluded "artwork generated by [AI]." *Id.* at 12.

73. Letter from U.S. Copyright Off. Rev. Bd. to Tamara Pester, Esq. 1–3 (Sept. 5, 2023).

74. *Id.* at 7–8

75. Note that this excludes "Théâtre D'opéra Spatial," which occurred after the statement.

76. Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190, 16190 (Mar. 16, 2023).

77. *Id.* at 16192.

78. *Id.* This scenario is an example of a work in which the "traditional elements of authorship" are attributable to a machine and therefore lack the requisite human authorship for copyright protection.

is used in conjunction with sufficient human effort to permit registration. In such situations, copyright protects only human-authored elements.[79] While AI adds nuance to registration inquiries, an important takeaway is that the Office stands firmly behind the human authorship requirement.

II. LEGAL BACKGROUND: COPYRIGHT LAW

Codified in Title 17 of the United States Code, the Copyright Act of 1976 ("Copyright Act"), including its subsequent amendments, is the governing source of copyright law.[80] Congressional authority to enact such legislation arises from the "Copyright Clause" in the U.S. Constitution, which vests in Congress the power to "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."[81] In the time since the enactment of the Copyright Act, there have been many amendments, resulting in a large body of law that simultaneously outlines rules and requirements with specificity and leaves considerable room for judicial interpretation.

A. REQUIREMENTS FOR PROTECTION

Under the Copyright Act, copyright "subsists . . . in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."[82] Copyright does not extend to underlying ideas.[83] The Copyright Act explicitly includes "musical works, including any accompanying words" and "sound recordings."[84] Generally, the requirements for copyright protection break down into four separate but interrelated requirements: (1) work of authorship, (2) tangible fixation, (3) originality, and (4) creativity.

Legislative history indicates that the phrase "work of authorship" is intended to provide flexibility.[85] The broad categories of works of authorship

79. *Id.* at 16192–93.
80. 17 U.S.C. §§ 101–1511.
81. U.S. CONST. art. 1, § 8, cl. 8.
82. 17 U.S.C. § 102(a).
83. *Id.* § 102(b) ("In no case does copyright protection . . . extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery . . . ."); Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 547 (1985) ("[N]o author may copyright facts or ideas. . . . [C]opyright is limited to those aspects of the work—termed 'expression'—that display the stamp of the author's originality.").
84. 17 U.S.C. § 102(a)(2), (7).
85. *Id.* § 102(a); H.R. REP. NO. 94-1476, at 51 (1976).

in § 102 of the Copyright Act are illustrative, not exclusive.[86] As mentioned, this requirement has been interpreted to require human authorship, but the Office's recent statement suggests technology can be involved in the "authorship," so long as there is sufficient human involvement.[87] A work satisfies the fixation requirement if it is fixed in a "tangible medium of expression" that is "sufficiently permanent or stable."[88] Congress has indicated that fixation form does not matter.[89] A fixed composition may be written sheet music, while a fixed sound recording may be a recording saved onto a compact disc.[90]

Fixed works of authorship must also satisfy the requirements of originality and creativity,[91] which require "independent creation plus a modicum of creativity."[92] Therefore, so long as the work is independently created, a lack of novelty does not preclude copyright protection.[93] The "modicum of creativity" standard is a relatively low threshold, requiring only that the work goes beyond independent effort[94] and bears a "spark of distinctiveness in *copyrightable expression*."[95]

There are unique considerations with regard to these requirements in the context of musical works because determining the requisite creativity in

86. H.R. REP. NO. 94-1476, at 53 (1976) (noting that the general outline provides for "sufficient flexibility to free the courts from rigid or outmoded concepts of the scope of particular categories").

87. Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190, 16190 (Mar. 16, 2023). What constitutes "sufficient" involvement remains to be determined.

88. 17 U.S.C. § 101. A "phonorecord" is defined as a "material object[] in which sounds, . . . are fixed by any method now known or later developed, and from which the sounds can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." A "copy," on the other hand, is a "material object[], other than [a] phonorecord[], in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." *Id.*

89. H.R. REP. NO. 94-1476, at 52.

90. U.S. COPYRIGHT OFF., *supra* note 64, at § 803.4.

91. Some characterize originality as "embodying creativity," while others view creativity as a "necessary adjunct to originality." 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.01(B)(2) (Matthew Bender, rev. ed. 2024). Regardless of the characterization, the two require distinction from one another.

92. Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 346 (1991). The Court in *Feist* explained that the originality requirement is "not particularly stringent," as it "requires only that the author make the selection or arrangement independently (*i. e.*, without copying that selection or arrangement from another work), and that it display some minimal level of creativity." *Id.* at 358.

93. 1 NIMMER & NIMMER, *supra* note 91, § 2.01(A)(1) ("[A] work is original and may command copyright protection even if it is completely identical with a prior work, provided it was not copied from that prior work but is instead a product of the independent efforts of its author.").

94. *See Feist*, 499 U.S. at 345 ("[T]he requisite level of creativity is extremely low; even a slight amount will suffice.").

95. Clanton v. UMG Recordings, Inc., 556 F. Supp. 3d 322, 331 (S.D.N.Y. 2021).

music can be contentious.[96] Creativity is said to inhere in one of three key elements of a musical work—harmony, melody, or rhythm.[97] While the typical source of protection for compositions is melody, courts vary in this regard, with sufficient creativity being found and denied on each basis.[98] Protection for musical works includes "accompanying words" or lyrics;[99] when lyrics and musical elements are integrated into one work, they are protected together and on their own.[100] Lyrics must also satisfy the requirements for protection, and whether lyrics qualify for protection is very situation-dependent.[101]

B. RIGHTS CONFERRED BY COPYRIGHT OWNERSHIP

Section 106 of the Copyright Act outlines the exclusive rights of a copyright holder, which broadly include reproduction, distribution, adaptation, performance, and display rights.[102] Actionable copying may pertain to infringement of any of these exclusive rights but must include infringement of at least one.[103] AI-generated music is most likely to implicate the reproduction, adaptation, and distribution rights.

96. 1 NIMMER & NIMMER, *supra* note 91, § 2.05(B) ("As applied to music, the requirement of originality is straightforward . . . . It is within the domain of creativity that special considerations rise to the fore."). It is important to note that courts typically combine originality and creativity under the term "originality," requiring a closer look at which requirement is really being addressed. *Id.* § 2.01(B)(2).

97. Newton v. Diamond, 204 F. Supp. 2d 1244, 1249 (C.D. Cal. 2002), *aff'd,* 388 F.3d 1189 (9th Cir. 2004).

98. *See, e.g.*, N. Music Corp. v. King Rec. Distrib. Co., 105 F. Supp. 393, 400 (S.D.N.Y. 1952) (suggesting that finding creativity in rhythm is rare, if not impossible, and harmony is not likely the subject of copyright in itself); Santrayll v. Burrell, No. 91-cv-3166, 1996 U.S. Dist. LEXIS 3538, at *4 (S.D.N.Y. Mar. 25, 1996) (holding that repetition of word in a distinct rhythm was copyrightable); Levine v. McDonald's Corp., 735 F. Supp. 92, 99 (S.D.N.Y. 1990) (suggesting that melody is not required for copyright if sufficient rhythm and harmony is present).

99. 17 U.S.C. § 102(a)(2).

100. Marya v. Warner/Chappell Music, Inc., 131 F. Supp. 3d 975, 984 (C.D. Cal. 2015).

101. Clanton v. UMG Recordings, Inc., 556 F. Supp. 3d 322, 332 (S.D.N.Y. 2021) (holding that the expression "I'm tryna make my momma proud" does not satisfy the creativity and originality requirement); TufAmerica, Inc. v. Diamond, 968 F. Supp. 2d 588, 604 (S.D.N.Y. 2013) (denying a motion to dismiss the claim which was based on the phrase "say what," which was both in the song and the title). Note, however, that infringement claims regarding lyrics are often addressed more thoroughly in the context of fair use and substantial similarity.

102. 17 U.S.C. § 106.

103. S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081, 1085 n.3 (9th Cir. 1989) ("The word 'copying' is shorthand for the infringing of any of the copyright owner's five exclusive rights, described at 17 U.S.C. § 106.").

1. Reproduction Right

The first exclusive right relevant to AI music is the right to "reproduce the copyrighted work in copies or phonorecords."[104] In the music context, a USB with a sound recording would qualify as a phonorecord, while a written composition of the song, like sheet music, would be considered a copy.[105] To infringe on the reproduction right, the subsequent work must be a tangible, material, fixed object. An important music-specific caveat in 17 U.S.C. § 114 ("section 114") is that the reproduction right in recordings is "limited to the right to duplicate the sound recording in . . . phonorecords or copies that directly or indirectly recapture the *actual sounds* fixed in the recording."[106] This means that phonorecords with sounds that merely imitate the original sound, as opposed to actually recapturing the original sounds, do not infringe on the reproduction right, "even though such sounds imitate or simulate those in the copyrighted sound recording."[107] This has been interpreted as precluding liability for substantially similar imitations of a recording absent any exact copying; this is important in the context of music sampling, as it requires proof of exact duplication.[108]

2. Adaptation Right

Copyright owners also have the exclusive right to "prepare derivative works based upon the copyrighted work," as well as to authorize others to do so.[109] A derivative work is one that must be "based upon one or more pre-existing works," which is interpreted to mean that a latter work incorporates a sufficient amount of the original work to go beyond mere inspiration.[110] The adaptation right is closely tied to the other exclusive rights, namely the reproduction and performance rights. When a work is deemed to be a derivative, there is a necessary implication that the reproduction or performance right was also infringed because the second work is substantially similar.[111] With respect to sound recordings, the right to

104. 17 U.S.C. § 106. The introductory language of § 106 further specifies that copyright owners have exclusive rights to authorize the exercise of the six rights.

105. *Copyright Registration of Musical Compositions and Sound Recordings*, COPYRIGHT OFF., https://www.copyright.gov/register/pas-r.html#:~:text=A%20musical%20composition%20may%20be,%2C%20spoken%2C%20or%20other%20sounds [https://perma.cc/Z6UG-FKHH]. It is important to distinguish a phonorecord from the actual recording: the sound recording itself is not a phonorecord, but the medium on which it is stored is.

106. 17 U.S.C. § 114(b) (emphasis added).

107. *Id.*

108. Bridgeport Music, Inc. v. Dimension Films, 410 F.3d 792, 800 (6th Cir. 2005) ("This means that the world at large is free to imitate or simulate the creative work fixed in the recording so long as an actual copy of the sound recording itself is not made.").

109. 17 U.S.C. § 106(2).

110. *Id.* § 101; 2 NIMMER & NIMMER, *supra* note 91, § 8.09(A)(1).

111. Twin Peaks Prods., Inc. v. Publ'ns Int'l, Ltd., 996 F.2d 1366, 1373 (2d Cir. 1993).

produce derivative works is limited to those in which "actual sounds fixed in the sound recording are rearranged, remixed, or otherwise altered in sequence or quality."[112] The independent fixation exclusion to the reproduction right also applies to the adaptation right.[113] As with the reproduction right, this limitation finds notable importance in the realm of music sampling and licensing.[114]

3. Distribution Right

The third exclusive right relevant to music is the right to "distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership."[115] To violate the distribution right, there must be a tangible product, whether a phonorecord or a copy. The distribution right in the music context involves the right to sell copies, like sheet music, and phonorecords, such as CDs, of the musical work to the public. In the context of Internet platforms, specifically music platforms for sharing sound recordings, there are questions as to whether making copyrighted works available to the public constitutes a violation of this right. Although courts have not unanimously agreed on the answer, it seems clear that making sound recordings available for download by the public on file sharing networks is likely sufficient to demonstrate infringement.[116] Unlike the reproduction and adaptation rights, section 114 does not explicitly name the distribution right in limiting exclusive rights in a recording to exact copies; however, this is likely immaterial because a mere imitation of sounds in the original would seemingly fall outside the definition of the right as applying to distributing copies or phonorecords *of the original work*.[117]

112. 17 U.S.C. § 114(b).

113. *Id.* ("The exclusive rights of the owner of copyright in a sound recording under clauses (1) and (2) . . . 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 simulate those in the copyrighted sound recording.").

114. Bridgeport Music, Inc. v. Dimension Films, 410 F.3d 792, 800 (6th Cir. 2005).

115. 17 U.S.C. § 106(3).

116. 2 NIMMER & NIMMER, *supra* note 91, § 8.11(D)(4)(a). This question would generally relate more to the potential liability of the generative AI platforms themselves, as opposed to users. For more background on the differing interpretations of this question, however, see generally A&M Recs., Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001); UMG Recordings, Inc. v. Hummer Winblad Venture Partners, 377 F. Supp. 2d 796 (N.D. Cal. 2005).

117. Section 114(b) only explicitly limits the reproduction and adaptation rights to literal duplications; however, if an independent fixation mimicking sounds is not a copy or phonorecord for the purposes of clauses (1) and (3) of section 106, it seems fair that same understanding would implicitly apply to clause (2); *see* 17 U.S.C. §§ 106, 114.

C. ADDITIONAL MUSIC-SPECIFIC CONSIDERATIONS

1. Musical Composition Versus Sound Recordings

One unique aspect of music copyright is that there are two sources of protection in a song: the musical composition and the sound recording.[118] These are considered distinct elements of a musical work, with each being independently copyrightable.[119] While both elements are subject to the same requirements for protection, it is important to distinguish between the two, as the law applies differently to each in certain respects. This distinction plays an overall significant role in infringement actions, from whether something is actionable to what royalties are owed for a use.

While some cases have blurred the line between the composition and recording,[120] others reflect the importance of keeping them separate, as it is clear that determining applicable case law and potential arguments depends on whether the claim is based on recording or composition. Cases are also revelatory of how outcomes differ based on which element is allegedly infringed.[121] Pertinent to this Note's discussion, it is both possible and not necessarily uncommon for a work to infringe on the rights of ownership of the composition, but not the recording. Because infringement of the recording has been read to require actual duplication of sounds, a work that recreates but does not directly sample a guitar solo can infringe on the composition but give rise to no cause of action for infringement of the sound recording. Thus, this Note will continue to emphasize the line between these two elements, and how AI-generated music may or may not infringe on each.

118. A musical composition, which itself consists of music and lyrics, is typically the work of composers or lyricists, or both. A sound recording, often in the form of a master recording, is the "physical embodiment of a particular performance of the musical composition." Hutson v. Notorious B.I.G., LLC, No. 14-2307, 2015 U.S. Dist. LEXIS 170733, at *9 n.2 (S.D.N.Y. Dec. 21, 2015).

119. Prior to the enactment of the Copyright Act, the 1909 Act required musical works to be recorded on sheet music or another manuscript in order to be protected, excluding protection for sound recordings as a matter of statutory law. 1 NIMMER & NIMMER, *supra* note 91, §§ 2.05(A)(1)(a), 2.10(A)(1)(c). This Note, however, will focus exclusively on musical works that are governed by the Copyright Act, which protects compositions and recordings.

120. In *Bridgeport Music, Inc. v. UMG Recordings, Inc.*, the court found infringement of the musical composition. Confusingly, however, this was based on the appropriation of elements exclusive to the sound recording, despite the fact that the plaintiff did not own the recording; not owning the recording would seemingly mean infringement of the recording would not be actionable, but the court allowed the suit to proceed. 585 F.3d 267, 276 (6th Cir. 2009).

121. *See, e.g.*, Newton v. Diamond, 204 F. Supp. 2d 1244, 1250–52, 1260 (C.D. Cal. 2002) (dismissing an infringement claim based on the composition because the alleged infringement related to elements of performance only reflected in the recording, which plaintiff neither owned nor alleged infringed), *aff'd*, 388 F.3d 1189 (9th Cir. 2004).

2. Licensing and Sampling

Licensing and sampling are unique considerations in the music context. Licensing, whether it is compulsory and imposed by the Copyright Act or voluntarily negotiated,[122] functions as a means of ensuring that owners are compensated for the use of their work. How licenses are obtained and what they allow a licensee to do depends on what aspect of the musical work is involved and who is seeking to license it. Central to the discussion in this Note, however, is the royalty aspect of licensing. Because the hypothetical uses analyzed in this Note did not involve licensing the songs, the artists did not receive compensation in royalty payments for these uses.

A very common practice in the music industry that potentially implicates the need for obtaining a license is sampling. "Sampling" refers to the practice of incorporating short segments of sound recordings into new recordings.[123] Typically, when the word sampling is used, it means there is a literal duplication of some portion of the original work, not merely an imitation.[124] Because sampling involves using a clip in an identical sounding way or with limited alterations, the issues presented by sampling usually fall under the substantial similarity inquiry.[125] Courts are divided on how to approach sampling, particularly with regard to whether applying the de minimis doctrine is appropriate. On one end of the spectrum, the Sixth Circuit in *Bridgeport Music, Inc. v. Dimension Films* held that sound recording owners have exclusive rights to sample their own recordings, which led to the strong recommendation to "[g]et a license or do not sample."[126] This indicated a bright-line rule that any unauthorized use of the recording constitutes infringement, dispensing of the substantial similarity requirement as it pertains to sound recordings.[127] This view has been sharply criticized by many courts on the other end of the spectrum. Rejecting the *Bridgeport* view, the Ninth Circuit in *VMG Salsoul, LLC v. Ciccone* held that the de minimis doctrine extends to sound recordings, thereby necessitating

122. *See* 17 U.S.C. §§ 114–15. The central licensing provisions in the U.S. Copyright Act ("Copyright Act") that would potentially be relevant in this context are those in §§ 114 and 115. Section 114 applies to sound recordings and § 115 applies to musical compositions.

123. *Newton*, 388 F.3d at 1191.

124. This may be a question for the factfinder, however, as it is not always clear, or admitted, that a use was effectively "copied and pasted" rather than independently recreated.

125. *Newton*, 388 F.3d at 1195 (explaining that the substantiality requirement applies throughout copyright law, including cases involving samples).

126. Bridgeport Music, Inc. v. Dimension Films, 410 F.3d 792, 801 (6th Cir. 2005). The court explained that requiring licensing does not stifle creativity and will be kept under control by the market; it was also noted that sampling is "never accidental" because sampling involves knowledge of taking another's work, thereby making licensing requirements fair. *Id.*

127. *Id.* at 801 n.18.

the usual substantial similarity inquiry.[128] As such, the assessment of sampling in AI-generated music will differ based upon whether the court applies a sampling friendly or unfriendly approach.

D. COPYRIGHT INFRINGEMENT ACTIONS

To establish an actionable copyright infringement claim, the owner must prove the following: (1) they own a valid copyright and (2) there has been copying of the original expression contained therein.[129]

1. Ownership of a Valid Copyright

As to the first requirement, valid copyright exists when an original work falls within the protectable subject matter of copyright law and adheres to statutory formalities, including fixation, duration, and national origin.[130] Additionally, registration of the work with the Office is typically a prerequisite for an infringement claim and serves as *prima facie* evidence of both a valid copyright and ownership thereof.[131] The second prong, ownership, is a legal conclusion based on relevant facts;[132] ownership is particularly important in the music context given the separation of the composition and recording. Once this is established, one can draw a conclusion as to which exclusive rights the owner has, which then form the basis of an infringement claim.

2. Copying

Despite extensive similarity, there can be no infringement without copying. Actionable copying must relate to protectable elements of the original work.[133] This requirement is best understood as consisting of two elements: factual copying and legal copying.[134] Factual copying poses a purely factual question: did the defendant know of the protected work, have access to it, and use it in some way in the production of their work?[135] To establish that the defendant actually copied the original, direct or indirect

128. VMG Salsoul, LLC v. Ciccone, 824 F.3d 871, 880–87 (9th Cir. 2016) (creating a circuit split with its holding that the de minimis exception applies to allegations of infringement involving sound recordings); *see also* Batiste v. Lewis, 976 F.3d 493, 505–06 (5th Cir. 2020); Saregama India Ltd. v. Mosley, 687 F. Supp. 2d 1325, 1338–41 (S.D. Fla. 2009), *aff'd,* 635 F.3d 1284 (11th Cir. 2011).

129. 17 U.S.C. § 501(a)–(b); Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 361 (1991).

130. *See* Varsity Brands, Inc. v. Star Athletica, LLC, 799 F.3d 468, 476 (6th Cir. 2015), *aff'd,* 580 U.S. 405 (2017).

131. *Id.* at 477.

132. 17 U.S.C. § 201.

133. *Feist*, 499 U.S. at 361.

134. Peter Letterese & Assocs., Inc. v. World Inst. of Scientology Enters., 533 F.3d 1287, 1300 (11th Cir. 2008).

135. New Old Music Grp., Inc. v. Gottwald, 122 F. Supp. 3d 78, 85, 93 (S.D.N.Y. 2015).

evidence may be used.[136] Absent direct proof, copying can be established circumstantially if the plaintiff can show the defendant "had access to the copyrighted material,"[137] and similarities exist between the works that are "probative of copying."[138]

Legal copying is often referred to as "improper appropriation" or "substantial similarity."[139] Copying does not require verbatim replication of the original work, rather it requires that copying result in the production of a substantially similar work.[140] Experts describe the question of when similarity rises to the level of "substantial" as one of the toughest questions in copyright law.[141] Similarity exists on a spectrum, spanning from the most trivial similarities, which are not actionable, to absolute, literal similarity that renders a second work identical. One approach to similarity divides it into two types: "comprehensive nonliteral similarity" and "fragmented literal similarity."[142] Comprehensive nonliteral similarity speaks to similarity in the "fundamental essence or structure" of a work. Fragmented literal similarity refers to duplication of literal elements of an original, but only in a fragmented manner, such as the exact duplication of only three lines of text. Fragmented literal similarity is often described as a de minimis doctrine, as the question gets at whether a use is de minimis or not.[143]

Regardless of the type of similarity involved, courts imposed one additional barrier for copying of protected elements to be actionable: the copying must not be de minimis.[144] In the context of copyright, "de minimis

136. Jorgensen v. Epic/Sony Recs., 351 F.3d 46, 51 (2d. Cir. 2003) (citation omitted).

137. *Id.* (citing Herzog v. Castle Rock Ent., 193 F.3d 1241, 1249 (11th Cir. 1999)). Access speaks to a "reasonable possibility" of access, not simply a "bare possibility." Gaste v. Kaiserman, 863 F.2d 1061, 1066 (2d Cir. 1988). However, access may be inferred when the works are "so strikingly similar as to preclude the possibility of independent creation." Repp v. Webber, 132 F.3d 882, 889 (2d Cir. 1997) (citation omitted).

138. *Jorgenson*, 351 F.3d at 51 (citing *Repp*, 132 F.3d at 889).

139. 4 NIMMER & NIMMER, *supra* note 91, § 13D.02(B)(2). This Note will use the term "substantial similarity."

140. Ringgold v. Black Ent. Television, Inc., 126 F.3d 70, 74 (2d Cir. 1997) (describing "substantial similarity" as the threshold for whether copying is actionable).

141. 4 NIMMER & NIMMER, *supra* note 91, § 13.03(A) (noting also that a "mere distinguishable variation [may] constitute a sufficient quantum of originality so as to support a copyright in such variation, that same distinguishable variation . . . may not sufficiently alter its substantial similarity to another" (internal quotations marks omitted)).

142. *Id.* Although this distinction has not widely been recognized by courts in an express manner, the terminology has been endorsed in a variety of cases and can be helpful in keeping straight the types of similarities that are presented in this Note's sample songs.

143. *See* Warner Bros. Inc. v. ABC, 720 F.2d 231, 242 (2d Cir. 1983).

144. *De minimis non curat lex*, usually shortened to *de minimis*, is a legal maxim that represents the idea that "[t]he law does not concern itself with trifles." *De minimis non curat lex*, BLACK'S LAW DICTIONARY (11th ed. 2019).

copying" can be understood as the opposite of substantial similarity.[145] While the idea of de minimis copying sounds simple, its application is not necessarily straightforward because it is highly fact dependent. A de minimis determination pertains both to the quantity and quality of the use, therefore a "simple word count" is not alone enough to determine infringement.[146] In the music context, whether uses are deemed de minimis can vary greatly; in one instance, a six-second segment of a four-and-a-half-minute song was deemed a de minimis use,[147] but in another, a three-second orchestra sequence was not.[148]

Courts have developed a wide variety of approaches to determine when similarity rises to the level of substantial in these types of cases. The three test categories that are most commonly used in similar music-related cases are the extrinsic-intrinsic, ordinary observer, and fragmented literal similarity tests.[149] While they each take slightly different approaches to determining the presence of substantial similarity, they are all ultimately rooted in the foundational question of whether there is similarity in those elements to which copyright protection would extend.

3. Fair Use Defense

Section 107 carves out a limitation on exclusive rights, commonly known as the fair use defense. Four factors are considered in determining whether a use is a fair use:

> (1) [T]he 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.[150]

While the Copyright Act dictates that these four factors "shall" be considered, how they have actually factored in has developed over time through judicial interpretation. The seminal case that guides all applications

145. Newton v. Diamond, 388 F.3d 1189, 1193 (9th Cir. 2004) ("To say that a use is de minimis because no audience would recognize the appropriation is thus to say that the use is not sufficiently significant.").

146. Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc., 166 F.3d 65, 71 (2d Cir. 1999).

147. *Newton*, 388 F.3d at 1195–96 (concluding that the portion used was neither quantitatively nor qualitatively important to the original work).

148. TufAmerica, Inc v. Diamond, 968 F. Supp. 2d 588, 606–07 (S.D.N.Y. 2013) (holding that a sequence was repeated in the original work and ultimately constituted fifty-one seconds, which gave it qualitative and quantitative importance).

149. There are other judicially formulated tests for substantial similarity, but these three appear to be the most commonly used in music cases, particularly in recent years.

150. 17 U.S.C. § 107.

of the fair use defense is *Campbell v. Acuff-Rose Music, Inc.*, a 1994 Supreme Court case that addressed a musical parody.[151] The Court cautioned against simplifying the analysis to bright-line rules, emphasizing that fair use determinations must be done on a case-by-case basis, weighing each factor together.[152] While the general principles from *Campbell* remain, the Supreme Court recently addressed fair use again in *Andy Warhol Foundation for the Visual Arts, Inc. v. Goldsmith*, in which the Court limited the fair use defense with regard to the first factor's transformation inquiry.[153] This will likely have particular salience in infringement cases involving AI because AI is inherently transformative; however, this type of transformation may not hold as much weight under the new understanding of the first factor post-*Goldsmith*.

While fair use is regularly litigated in many copyright cases generally, musicians tend to avoid it.[154] This initially seems odd given that the seminal case for fair use, *Campbell*, involves music; but *Campbell* is really a parody case. Outside the context of parody,[155] *Estate of Smith v. Cash Money Records, Inc.*, is the only federal case recognizing a songwriter's fair use in copying another song.[156] While artist-defendants have pled fair use in their answers to infringement cases, they typically defend their work on other grounds.[157] A 2018 empirical study revealed that, up to that point, no defendant had successfully established a non-parody fair use of another

151. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 572 (1994) (holding that the commerciality prong of a fair use analysis is insufficient to determine whether a use qualifies for the § 107 exception).

152. *Id.* at 577–78 ("The fair use doctrine thus permits [and requires] courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which the law is designed to foster.") (alteration in original) (citation omitted) (internal quotation marks omitted).

153. Andy Warhol Found. for the Visual Arts v. Goldsmith, 598 U.S. 508 (2023). This holding was likely welcomed by lower courts who criticized how the factor had expanded. *See* Kienitz v. Sconnie Nation LLC, 766 F.3d 756, 758 (7th Cir. 2014) ("[Courts have] run with the suggestion [of transformative use] and concluded that [it] is enough to bring a modified copy within the scope of § 107.").

154. Edward Lee, *Fair Use Avoidance in Music Cases*, 59 B.C. L. REV. 1873, 1877 (2018).

155. There has been at least one case finding fair use of copyrighted music by schools, but that is excluded from this discussion because the court found that the use fell "plainly within the enumerated fair use purposes of teaching and nonprofit education," so the analysis was very different. Tresóna Multimedia, LLC v. Burbank High Sch. Vocal Music Ass'n, 953 F.3d 638, 654 (9th Cir. 2020).

156. Estate of Smith v. Cash Money Recs., Inc., 253 F. Supp. 3d 737, 752 (S.D.N.Y. 2017). This case is described as a music case but involved only lyrics. Some have questioned whether the use should have even really been considered a "musical work" because it was a spoken acapella rap. Lee, *supra* note 154, at 1876. There is one other case, *Chapman v. Maraj*, in which the court said the use of part of a song in a non-parodic manner was fair use. Chapman v. Maraj, No. 18-cv-09088, 2020 U.S. Dist. LEXIS 198684, at *34 (C.D. Cal. Sept. 16, 2020). However, in *Chapman*, the use was never released and was only for "artistic experimentation" while waiting on license approval from the owner. *Id.* at *33.

157. *Compare* Answer of Defendants at 28, Skidmore v. Led Zeppelin, 2016 U.S. Dist. LEXIS 51006 (C.D. Cal. Apr. 8, 2016) (No. 15-3462) (asserting a fair use affirmative defense), *with* Skidmore v. Led Zeppelin, 952 F.3d 1051, 1079 (9th Cir. 2020) (affirming conclusion that there was no infringement, but not discussing fair use at all).

work's musical notes.[158] Therefore, how fair use will operate in this context will be somewhat speculative.

III. APPLICATION AND ANALYSIS

A. SAMPLE SONG A

Sample Song A is highly similar to "Heart on My Sleeve" by "Fake Drake." While it sounds deceptively like Kanye West, both in the voice and in that it employs lyrics that intentionally evoke similar themes to his recent works, these similarities are highly unlikely to be cognizable under copyright law for several reasons. Rather than being copyright infringement, this Kanye-inspired song is almost certain to be considered what the courts have called a "soundalike." But because songs like this have already been the source of contention regarding music and copyright, it is helpful to understand the basis for why this is unlikely to be a successful claim.

For the purposes of this application, it is assumed that there are valid copyrights for the songs from *Yeezus* that were used in creating Sample Song A, including "Black Skinhead." It is also assumed that West owns the valid copyrights for both the sound recordings and underlying compositions.[159] Thus, the first requirement of a copyright infringement claim, ownership of a valid copyright, is presumed to be satisfied. This means that West is entitled to the exclusive rights outlined in the Copyright Act. Infringement of one of these rights must be the basis of his claim against User A, which presents just one of many road bumps in an attempted lawsuit based on this type of activity: copying as it relates to his voice or style can pertain only to the sound recording. As such, he is limited to claiming infringement on his right to reproduce, adapt, distribute, and perform the sound recording.[160]

158. Lee, *supra* note 154, at 1878.

159. West's label likely owns the rights to *Yeezus* and "Black Skinhead," but the copyright ownership is attributed to West for the ease of application; *see Detailed Record View: Registration Record SR0000724178*, COPYRIGHT PUB. RECS. SYS., https://publicrecords.copyright.gov/detailed-record/26242659 [https://perma.cc/33D7-8XDX] (*Yeezus* registration); *Detailed Record View: Registration Record PA0001890242*, COPYRIGHT PUB. RECS. SYS., https://publicrecords.copyright.gov/detailed-record/26654806 [https://perma.cc/Q7ZD-ESAZ] ("Black Skinhead" registration). It is important to note, as earlier, that there may be an important discussion to be had regarding copyright liability on the part of the owner of the AI system or program, as they are trained on these songs. For the purpose of this Note, however, that claim is being set aside to instead focus on output liability.

160. 17 U.S.C. §§ 106, 114. Note that the public performance right noted here is only that which pertains to the sound recording, meaning performance by means of digital audio transmission. *Id.* § 106(6).

1. Factual Copying

Whether or not there is any possibility of an actionable claim will depend on the second requirement of copying, which is divided into two prongs: factual copying and legal copying. West's claim would most likely have to rest on an infringement of a right associated with "Black Skinhead" specifically because satisfying the copying requirements for an entire album comprised of a variety of types of songs seems very unlikely. Turning first to factual copying, this prong asks the question of whether the defendant knew of, had access to, and in some way used the protected work in the production of their work. This requirement would seemingly be satisfied by the AI system's owner, as the question could be answered by looking at the songs the system is trained on to produce work that sounds like West. However, it is likely more complicated when the infringer is merely the user who is not responsible for or involved with inputting data. While the prompt used by User A strongly suggests their desire and intent to use *Yeezus* and "Black Skinhead" in some way, it is not obvious whether this satisfies the factual copying requirement. This inquiry raises two key questions: can the use by Uberduck be imputed onto User A or can indirect evidence be used to sufficiently prove factual copying by User A themselves?

While it can arguably be assumed that Uberduck is trained on *Yeezus* and "Black Skinhead" given its option of West's voice in the style of *Yeezus*, it cannot be verified for certain absent an admission from Uberduck's programmer. However, this is not detrimental to a claim by West because factual copying can be proven using indirect evidence, which requires only demonstrating that defendant had access to the copyrighted work and that there are substantial similarities between the works that are "probative of copying."[161] While access cannot be demonstrated by showing a bare possibility that the defendant accessed it, a reasonable possibility of access can.[162] Where these two key questions diverge is on how that possibility of access is demonstrated, whether it be access by the system imputed onto User A or access by User A themselves. Starting with the system, the offering of a *Yeezus*-style voice suggests a reasonable possibility of access to "Black Skinhead" for a few reasons. First, from a technological perspective, Uberduck utilizes DL, which alone requires significant amounts of data input for the system to learn; for a model to be able to replicate West's voice from a specific album, it can be inferred that the whole album would have been used to provide as much learning material as possible to create the most authentic results. So-VITS-SVC, the specific DL model Uberduck uses to

161. Jorgensen v. Epic/Sony Recs., 351 F.3d 46, 51 (2d Cir. 2003) (quoting Repp v. Webber, 132 F.3d 882, 889 (2d Cir. 1997)).

162. *Id.* (citing Gaste v. Kaiserman, 863 F.2d 1061, 1066 (2d Cir. 1988)).

make songs that sound like West, involves a process of using relevant source audios of West to separate out his voice, which is then encoded to analyze and use the distinctive characteristics of his voice from those songs. Additionally, the HiFi-GAN model that Uberduck uses helps to train the generator to recognize authentic versus fake West samples until it can produce highly realistic-sounding speech.

Asserting that the voice can sound specifically like West in *Yeezus*, together with the technological understanding that this would require as much relevant training data as possible, it seems fair to conclude it is reasonably possible that the system had access to "Black Skinhead," which is one of only ten songs on the album. Even considering the unlikely possibility that not all ten songs were used to create a *Yeezus*-inspired voice, it seems very reasonable to conclude that "Black Skinhead" would be used because it was the first single released from the album,[163] it has since been certified platinum in the United States three times, and West performed it repeatedly,[164] all of which arguably make it a hallmark of the *Yeezus* era.[165] It is difficult to imagine a *Yeezus*-style voice could be trained without the use of this song. Technology aside, access can also be shown through a theory of widespread dissemination,[166] and, for the reasons just stated, "Black Skinhead" was clearly widely disseminated. However, this theory of access is likely not applicable to the system itself outside the context of liability for input.

Having established a relatively strong claim of reasonably likely access, the next question turns on whether that access could be imputed onto User A. Courts have held that there was a reasonable possibility of access by the defendant in certain circumstances in which such access is inferred based on an "intermediary."[167] One iteration of this theory of access is that access can

163. David Greenwald, *Kanye West Prepping 'Black Skinhead' as First 'Yeezus' Single*, BILLBOARD (June 28, 2013), https://www.billboard.com/music/rb-hip-hop/kanye-west-prepping-black-skinhead-as-first-yeezus-single-1568684 [https://perma.cc/UD8X-P5BT].

164. *Gold & Platinum*, RIAA, https://www.riaa.com/gold-%20platinum/?se=Kanye+west&tab_active=default-award&col=title&ord=asc [https://perma.cc/RL72-KN2Q].

165. *See, e.g.*, Miriam Coleman, *Kanye West Unleashes the Fury of 'Black Skinhead' on 'SNL'*, ROLLING STONE (May 19, 2013), https://www.rollingstone.com/music/music-news/kanye-west-unleashes-the-fury-of-black-skinhead-on-snl-167279 [https://perma.cc/E7NF-26Y6]; Edwin Ortiz, *Watch Kanye West Perform "Black Skinhead" on "Le Grand Journal"*, COMPLEX (Sept. 23, 2013), https://www.complex.com/music/a/edwin-ortiz/kanye-west-black-skinhead-performance-on-le-grand-journal [https://perma.cc/LKP8-6ZXB]; Marc Hogan, *Drake Welcomes Kanye West for 'Black Skinhead' Live in Berlin*, SPIN (Feb. 28, 2014), https://www.spin.com/2014/02/drake-kanye-west-black-skinhead-berlin-live-video [https://web.archive.org/web/20240524193340/https://www.spin.com/2014/02/drake-kanye-west-black-skinhead-berlin-live-video].

166. Three Boys Music Corp. v. Bolton, 212 F.3d 477, 482 (9th Cir. 2000), *overruled by* Skidmore v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (overruling the use of the inverse ratio rule).

167. *Jorgensen*, 351 F.3d at 53.

be inferred if the intermediary or third party is connected to the copyright owner *and* the infringer.[168] Courts that have entertained this argument have varied on the relationship the intermediary must have with both parties, but a key characterization appears to be that it is a "close relationship," which might be found when the intermediary contributes creative ideas to the infringer, supervises the infringer's work, or has worked together in the same department as the infringer.[169] There are two wrinkles in trying to apply this argument here. First, most cases involve the intermediary being *given* the copyrighted work by the owner.[170] This is potentially less damaging because it still seems relevant whether the third party heard the song, as this also factors into the conclusions in addition to whether the intermediary was given a copy.[171] Second, the relevant cases involving inferences based on intermediary access have involved a human intermediary.[172] This may be particularly problematic for a plaintiff in a situation like West because it is hard to apply a framework of a close human relationship to the relationship between a computer program, a user, and input data. However, given the novelty of generative AI technology and the unique issues presented by generative AI music, there is a chance courts will not deem this fatal.

One reason to think courts may be flexible here is because of the expanded willingness to hold Internet intermediary sites vicariously or contributorily liable for failing to monitor infringing material available on or through the use of the Internet's system.[173] While this speaks more to potential liability of the system as the sole infringer, it may still help convince a court to accept arguments based on non-traditional assistance in infringement, which is required here to first find the technology to have been an intermediary, and then impute liability onto a user. An indication that courts may be less likely to consider an AI system to be an intermediary turns on the assessment of AI in *Thaler v. Perlmutter*. As discussed, the court in *Thaler* emphasized the importance of human authorship for copyright

168. Gaste v. Kaiserman, 863 F.2d 1061, 1067 (2d Cir. 1988).

169. *Jorgensen*, 351 F.3d at 54–55; Towler v. Sayles, 76 F.3d 579, 583 (4th Cir. 1996); Meta-Film Assocs., Inc. v. MCA, Inc., 586 F. Supp. 1346, 1355–56 (C.D. Cal. 1984); Moore v. Columbia Pictures Indus., Inc., 972 F.2d 939, 942 (8th Cir. 1992). Note that some courts refer to this as the "Corporate Receipt Doctrine," but not all, and that name might add potential confusion to this analysis.

170. For example, in *Jorgensen*, the conclusion of access largely rested on the fact that the intermediary admitted to receiving the work and telling the owner he would forward it to the later infringer. 351 F.3d at 54–55.

171. Lessem v. Taylor, 766 F. Supp. 2d 504, 509–11 (S.D.N.Y. 2011).

172. There are discussions of Internet intermediaries in the context of copyright infringement, but these cases typically involve secondary liability because Internet programs were used to infringe, which is different from the issue of access.

173. *See generally* A&M Recs., Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001) (embracing an expansive understanding of vicarious liability in holding a music downloading platform liable for infringement by users).

protection.[174] The court rejected the plaintiff's "work-for-hire" argument, which he used to suggest that he had hired the AI system to create the painting for him; the court rejected the argument for several reasons, but most importantly noted that such provisions of the Copyright Act clearly only contemplated the involvement of humans as employees and the contractual relationship outlined in the provision required a meeting of the minds that cannot occur with a non-human entity.[175] While again, this speaks to a different type of imputation onto technology, it nonetheless reflects a hesitancy to treat technology itself like a human. This provides good reason to question whether a court would find an AI system to be a sufficient intermediary to justify an inference of access.

Given that courts have at times expressed the need to be careful in imposing liability when infringement is not done directly,[176] it is worth considering the possibility that a court assessing generative AI may have trepidations about holding a user liable for infringement that may technically be executed through the complex algorithm of an AI system without any input from the user besides a brief prompt.[177] However, case law has consistently indicated that a finding of infringement is not dependent upon finding that the defendant intended to infringe.[178] As such, it seems unlikely that an individual could escape potential imputation of access by simply arguing they intended to use the system to create a new song, not to infringe on the copyright of another.

Assuming the inference of access could not be imputed onto User A by way of an intermediary theory, there remains the question of whether factual copying by User A can be proven through the same indirect evidence approach without any imputation or involvement of the AI system. As mentioned earlier, one avenue for demonstrating a reasonable probability of access is by pointing to widespread dissemination of the song, which

174. Thaler v. Perlmutter, 687 F. Supp. 3d 140, 142 (D.D.C. 2023).

175. *Id.* at 150 n.3.

176. Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 929 (2005) (explaining that there is a concern about imposing indirect liability based on the potential that it might "limit further development of beneficial technologies"). The Court in *Grokster* found that there was a powerful argument for imposing indirect liability in those circumstances, given the amount of infringement that was occurring on the platform, which was the party being held indirectly liable. *Id.*

177. Similar concerns may apply in a lawsuit against the platform, especially at this point when there remains much to be learned about how the technology actually works; however, this Note is focused on the liability of users, as the current state of technology often involves the use of multiple different platforms.

178. *See* Coleman v. ESPN, Inc., 764 F. Supp. 290, 294 (S.D.N.Y. 1991) ("Intent is not an element of copyright infringement."); Pinkham v. Sara Lee Corp., 983 F.2d 824, 829 (8th Cir. 1992) ("[D]efendant is liable even for innocent or accidental infringement.") (internal quotation marks omitted).

certainly seems like an available option here.[179] This assertion is likely bolstered by the fact that User A clearly knew of *Yeezus*, as they selected the *Yeezus* style, and had to have been familiar with the album generally because of the themes in their prompt. These facts, in addition to the widespread dissemination of the song and selection of a rap beat and lyrical themes so similar to "Black Skinhead" form a strong basis for concluding there is a reasonable likelihood of access to the song by User A. The potential issue that could arise is that User A may argue that they were not involved in the creation aside from the prompt and the few general selections. They may try to argue that, even if they had heard the song, this would not matter because their awareness was not involved in the actual creation of the song or what it sounds like. Ultimately, this would likely come down to a determination of whether the selections and prompt constitute sufficient involvement in the creation, but it seems possible that it would be enough because User A did in fact direct Uberduck in a very pointed direction, even if they did so through simple or general means. Additionally, this is unlikely to be where West's case completely crumbles, and User A has stronger, more important arguments in other areas.

Even if access is proven, the factual copying prong remains unsatisfied until West can demonstrate probative similarity. The probative similarity prong is likely much more straightforward in this case than the access prong. The idea behind probative similarity is that, combined with a reasonable probability of access, a level of similarity will give rise to a reasonable inference that the copyrighted work served as the source for the allegedly infringing work.[180] Determining the presence of probative similarity requires an examination of the two works as wholes to assess whether similarities are those which would not be expected to arise independently.[181] An important difference between this inquiry and the legal inquiry of substantial similarity is that probative similarity is not limited to protectable elements, meaning the inquiry takes a holistic approach focused on drawing a historical conclusion as to whether the copyrighted work was the basis in some way for the second work.[182] This could give West a small glimmer of hope because the songs may sound sufficiently similar when compared side-by-side, especially given that unprotectable elements of his style and voice can technically be considered. Because the song sounds like West and expresses themes common to "Black Skinhead" and *Yeezus* more generally, a jury looking holistically at the two songs may find the similarity to be probative

179. Three Boys Music Corp. v. Bolton, 212 F.3d 477, 482 (9th Cir. 2000), *overruled by* Skidmore v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (overruling the use of the inverse ratio rule).

180. 4 NIMMER & NIMMER, *supra* note 91, § 13D.06

181. *Id.*

182. Positive Black Talk Inc. v. Cash Money Recs. Inc., 394 F.3d 357, 369–70 n.9 (5th Cir. 2004).

of copying. The level of similarity required to satisfy this requirement is lower than that of substantial similarity, as West must show only that Sample Song A overall is similar to "Black Skinhead" in a way that would be unexpected had User A not had access to the original.[183] But this is an uncertain outcome because it ultimately comes down to the jury's assessment of how the songs actually sound and is not dependent upon any legal criteria aside from the general rule of what probative similarity is. Although there is a chance West might prevail on factual copying by demonstrating access and probative similarity, it is likely short-lived because the legal copying inquiry remains.

2. Legal Copying

The end of the road for those like West who seek to vindicate their exclusive rights by legally challenging soundalikes almost certainly comes at the legal copying phase, if the claim even reaches that point. The substantial similarity prong of the copying requirement raises questions that a song like Sample Song A cannot satisfactorily answer. The chief problem here is that we are assuming the only real similarity is that it sounds like West's voice or is sung in his distinctive style, neither of which are copyrightable elements of his work. The exclusion of voice and style from the scope of copyright protection was confirmed solidly in the well-known case *Midler v. Ford Motor Co.*, in which Bette Midler lost on a claim of infringement based on a soundalike song that mimicked her voice almost exactly; the infringement claim relied solely on her voice, as the user had obtained rights to the song itself.[184] The Ninth Circuit stated bluntly that "voice[s] [are] not copyrightable," as they are not fixed works of authorship as required by the Copyright Act.[185] While West may try to point to the similar themes, copyright extends only to expression and not ideas. Regardless of what test is used, when a work is substantially similar only in regard to separate, unprotectable elements, there can be no infringement. There are instances in which unprotectable elements together can form the basis of substantial similarity, but that would not be possible when two songs do not sound alike aside from the voice and general genre or theme. Absent some concrete similarity, such as instrumental interludes, phrases, or even lyrics, there can be no actionable substantial similarity. Section 114 of the

183. *Id.* at 370; *see also* Ringgold v. Black Ent. Television, Inc., 126 F.3d 70, 75 (2d Cir. 1997) (explaining that the factual copying requirement of probative similarity "requires only the fact that the infringing work copies something from the copyrighted work; . . . [substantial similarity] requires that the copying is . . . sufficient to support the legal conclusion that infringement (actionable copying) has occurred").

184. Midler v. Ford Motor Co., 849 F.2d 460, 461–62 (9th Cir. 1988).

185. *Id.* at 462.

Copyright Act likely blocks this type of claim, as it states that the reproduction and adaptation rights do not extend to independent fixations, even if the recording imitates a copyrighted recording.[186] Therefore, Sample Song A would not qualify as a derivative work because, as a mere imitation, it cannot infringe on the adaptation right.

While all signs point to dismissal, there are two potential unique considerations that may be worth discussing. First, there is the question of whether Sample Song A should be considered a reproduction and adaptation, even though it is not the exact same, because the exact song was used to train the outputs of the generative AI system. Technically, AI is trained to the point that it can create its own patterns, but ultimately those are still developed using the copyrighted work. In the case of Sample Song A and Uberduck, So-VITS-SVC isolates the artist's voice, uses that voice to create and encode frequency bands that correspond to the distinctive characteristics of the voice in that audio, and then learns to make audio that uses those frequencies. There is potentially an argument that this is a literal reproduction of sounds in a way that should be separated from the intangible concept of a voice or style, and instead look at it like a remixed sample of audio of West's voice.[187] Under this theory, not only could the use be an infringement of the reproduction and distribution right, but Sample Song A would also potentially qualify as a derivative work, as it is a new song based on parts of West's recording in "Black Skinhead."[188] If this were to be considered a sample, under the *Bridgeport* view, this would qualify as infringement without even delving into the substantial similarity inquiry.[189] However, this is far from the only approach to sampling. Likely, the question of substantial similarity will remain central to determining whether this use of sampling constitutes infringement. As already discussed, Sample Song A and "Black Skinhead" cannot be substantially similar because their chief "similarity," West's voice and style, is not a protectable element of the song, so it would not be able to serve as the sole basis for infringement under any of the judicial tests. The use of West's vocal frequency bands would likely be deemed a de minimis use, which is a use in which "the average audience

186. 17 U.S.C. § 114(b).

187. This argument would require convincing a court that the use of frequencies extracted from the songs is equivalent to sampling a section and remixing it to say something else. While from a technological standpoint this could theoretically be true, it is both a stretch and would be difficult to prove those frequencies came from a certain song in the first place.

188. Frisby v. Sony Music Ent., No. 19-1712, 2021 U.S. Dist. LEXIS 51218, at *26–27 (C.D. Cal. Mar. 11, 2021).

189. Bridgeport Music, Inc. v. Dimension Films, 410 F.3d 792, 801 (6th Cir. 2005) ("Get a license or do not sample.").

would not recognize the appropriation."[190] It seems very unlikely that the average audience would recognize Sample Song A's use of vocal frequency bands extracted from "Black Skinhead" and West's other music, even though they might recognize that the voice generally sounds alike. This is certainly more complicated than an ordinary sampling inquiry because the use involves very small fragments used in very different ways; nonetheless, because the statutory language prohibits only that which is actually duplicated, the substantial similarity inquiry and de minimis interpretation would have to be based solely on those exact duplications of frequency bands. As such, if this is considered sampling, it would nonetheless likely be dismissed as a de minimis use.

However, even if the use is considered sampling, fair use will likely be an issue for West, whether or not the legal copying issue is addressed with a substantial similarity inquiry. If the sets of sounds from the source audio were actually sampled to make Sample Song A, they are fundamentally different because the frequencies inherently change when forming sounds that say different words. Therefore, if that could be considered an exact reproduction and adaptation of those sounds, it seems likely that a court would find that to be a fair use. While *Goldsmith* instructed the transformation inquiry to be reined in, this type of use is undeniably transformative in a way similar to the code transformed in *Google LLC v. Oracle America, Inc.*[191] While the basis for the sound of West's voice, the frequencies, were used, they were manipulated and restructured to such a significant degree, as evidenced by the creation of an entirely new set of lyrics rapped. This is comparable to the reverse engineering of object code in *Sega Enterprises Ltd. v. Accolade, Inc.*, in which the Ninth Circuit found reverse engineering in order to transform code into something entirely new to be a fair use.[192] In *Sega*, the court rejected the argument that a use in order to create competing products precludes a fair use finding, and emphasized the need to focus on several factors, including but not limited to commercial purposes; there, the use of copyrighted code was to understand the program's mechanisms and then create something entirely new that would be compatible with the program, which outweighed its purpose of creating an ultimately commercial product.[193] Here, the decoding of songs into frequency bands could be understood as an attempt to understand why West's voice sounds the way it does, and the subsequent use of such

190. VMG Salsoul, LLC v. Ciccone, 824 F.3d 871, 878 (9th Cir. 2016) (quoting Newton v. Diamond, 388 F.3d 1189, 1193 (9th Cir. 2004)).

191. *See* Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith, 598 U.S. 508, 527–41 (2023); Google LLC v. Oracle Am., Inc., 593 U.S. 1, 29–32 (2021).

192. Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1514–15 (9th Cir. 1992).

193. *Id.* at 1522–23.

frequency bands to say new words and make an entirely new song is a transformative purpose sufficient to count toward a fair use. While User A likely hoped their song would achieve commercial success, that does not negate the transformative purpose behind their use of frequency bands from West's music. Thus, the first fair use factor leans strongly in favor of the user.

As to the second factor, the nature of the work, West's music is inherently creative, which tends to count against fair use.[194] However, this is often not the most significant factor, and courts have not refused to find a fair use in situations involving creative works.[195] The third factor, amount and substantiality used, counts very strongly in favor of fair use. Vocal frequency bands constitute a very small amount of everything that goes into a song. Considering that all other elements, including instrumentals and lyrics, are entirely different, the use of frequency bands is a minor taking from the original, although West may try to argue that whole songs, presumably including "Black Skinhead," were encoded. In *Sega*, in which the entire program was encoded, the court noted that while that fact counts against fair use, the factor is of little weight when the actual use of that information is so limited.[196] Here, certainly not all of that which is encoded is used. What was encoded was a sufficient amount of frequency bands to analyze and understand vocal characteristics for future imitations;[197] while this may have involved a large number of frequency bands, that was what was required to serve the ultimately transformative purpose of creating a high-quality song that did not itself utilize all that was encoded for training purposes.[198] Because the third fair use factor asks about substantiality as well, there is an opening for West to try to argue that, even if frequency bands are one small part of a song, they are nonetheless substantial in relation to the whole work because they are responsible for creating his distinctive voice. This argument would face a few barriers, the first being that it is completely acceptable to make a song that simply sounds like someone else. Additionally, he may have a more compelling argument if those vocal frequencies were placed together and used to rap lyrics from one of his songs. But the frequency bands themselves, isolated from the other bands that

194. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 586 (1994).

195. The work at issue in *Campbell* was a song, as well, which is a work "closer to the core of intended copyright protection." *Id.*

196. *Sega*, 977 F.2d at 1526–27.

197. Google LLC v. Oracle Am., Inc., 593 U.S. 1, 34 (2021) ("The 'substantiality' factor will generally weigh in favor of fair use where, as here, the amount of copying was tethered to a valid, and transformative, purpose." (citation omitted)).

198. Estate of Smith v. Cash Money Recs., Inc., 253 F. Supp. 3d 737, 751 (S.D.N.Y. 2017) (finding that the third factor counted toward a fair use finding because the amount taken in sampling a song was "reasonable in proportion to the needs of the intended transformative use").

together create his voice, are hardly the "heart" of his original work, especially with how they have been changed in Sample Song A.[199]

The fourth fair use factor, the effect on the market, has received limited attention in the context of music. However, in *Frisby v. Sony Music Entertainment*, the court noted that two songs in the similar genres of rap and hip-hop were marketplace competitors.[200] As competitors, one copying the other could reasonably be expected to diminish the value and sales of the original.[201] Here, Sample Song A and "Black Skinhead" are certainly in the same genre, so they may properly be considered competitors in the music market. Following the line of reasoning in *Frisby*, this means it can be assumed that Sample Song A would have a negative impact on the value of "Black Skinhead" and, further, would harm the market for derivatives because it was used without a license.[202] Because sampling is so prevalent in the rap and hip-hop genres, this is particularly relevant here; West may argue that finding this a fair use would set the precedent that following proper sampling procedures is unnecessary. However, the facts here separate this case from that of *Frisby* because the potential sampling that occurred could have easily gone unnoticed absent the knowledge that it was created using an AI system that had encoded these vocal frequencies. To suggest that this use of "Black Skinhead" would have such a chilling effect on licensing in the industry seems to be taking *Frisby*'s presumptions too far.

Taking all four factors together, it seems that the highly transformative purpose and minimal amount used may be enough to weigh in favor of finding this to be a fair use, especially in light of the highly speculative arguments about market harm given that this does not involve sampling in the traditional sense. However, because the fourth factor is "undoubtedly the single most important element of fair use,"[203] it is possible that if a court adopts the view that sampling without a license has such an impact on the market for future derivatives, the fourth factor could be enough to compel the finding that this is not fair use. Of course, this would be a judicial determination, so it is not impossible that a court would accept these arguments, but it does not seem overly promising at this point. Given how courts have viewed voice and style thus far, it seems like a stretch to imagine the argument that vocals are really just compilations of protectable sounds

199. Elsmere Music, Inc. v. Nat'l Broad. Co., 482 F. Supp. 741, 744 (S.D.N.Y. 1980) (holding that a small use was nonetheless substantial because the small amount used happened to be the "heart of the composition").

200. Frisby v. Sony Music Ent., No. 19-1712, 2021 U.S. Dist. LEXIS 51218, at *40–41 (C.D. Cal. Mar. 11, 2021).

201. *Id.*

202. *Id.* at *41 (explaining that the harm to the market for derivatives must also be considered).

203. Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 566 (1985).

would suddenly work because of the technology involved.

The second consideration is that some may believe *Williams v. Gaye* opened the opportunity to argue style infringement. While the dissenting opinion in *Gaye* criticized the majority's conclusion as endorsing the idea of copyright protection for a musical style,[204] the bases for infringement included elements like signature phrases, hooks, and structural similarities.[205] These were similarities that, although alone may not have been protected, together led to substantial enough similarity that a jury concluded rights had been infringed. While these elements could be considered aspects of the plaintiff-artist's style, they clearly went beyond sounding like a voice. Additionally, *Gaye* focused on the composition, whereas Sample Song A's mimicking of West's voice could only speak to infringement of the recording because the alleged similarities relate only to what the vocals sound like, which is not fixed on a page like the phrases in *Gaye*. Putting aside the differences between Sample Song A and the infringing song in *Gaye*, a key weakness in West's style argument and whether *Gaye* made that argument an option is that this idea has not been embraced by other courts. While some courts have embraced a "total concept and feel" test for substantial similarity, both on its own and as part of an "intrinsic" test,[206] that test requires at least a claim based on original arrangement of unprotected elements.[207] Without some protectable element, whether it be lyrics or a drum beat,[208] a similar "feeling" song will not pass a substantial similarity test.[209] Here, even if a lay person has an initial reaction that the songs sound similar because the voice mimics West, that, again, is not copyrightable. Given that there are no elements of the instrumental track or lyrics to be the basis of this claim because these are original lyrics and a generic rap beat unlike "Black Skinhead," the mimicking of his voice is the only thing West could point to and that cannot pass the test. Therefore, even if *Gaye* introduced a way to litigate style infringement, which is debatable given other courts' avoidance of such a conclusion, it appears that there must be some sort of protectable expression in that style to base one's claim on. While West's voice may evoke a certain aesthetic style and certainly speaks to his creative expression, there is

204. Williams v. Gaye, 885 F.3d 1150, 1183–86 (9th Cir. 2018) (Nguyen, J., dissenting).

205. *Id.* at 1172.

206. *See infra* Sections III.B.2.i–ii.

207. Skidmore v. Led Zeppelin, 952 F.3d 1051, 1074 (9th Cir. 2020) ("We have extended copyright protection to a combination of unprotectable elements . . . only if . . . their selection and arrangement [are] original enough that their combination constitutes an original work of authorship.") (citation omitted) (internal quotation marks omitted).

208. *See, e.g.*, New Old Music Grp., Inc. v. Gottwald, 122 F. Supp. 3d 78, 95 (S.D.N.Y. 2015).

209. *See Skidmore*, 952 F.3d at 1064 (explaining that "only substantial similarity in *protectable* expression may constitute actionable copying that results in infringement liability") (emphasis added).

nothing in that expression that can be the source of a successful claim here.

None of this discussion is intended to denigrate the frustration on the part of West and similarly situated artists who understandably want to fight back against AI-generated songs that intentionally mimic their voices and do so in a way that misleads listeners. This certainly reflects Drake's perspective in response to "Heart on My Sleeve," which nearly duped the world.[210] However, these valid concerns do not bear a clear or logical connection to copyright law and its subject matter. Instead, these concerns likely find more coherence in the protections afforded by the laws relating to trademark, unfair competition, and state rights of publicity, which are tailored to protect against the unauthorized use of one's identity.[211] This is not to suggest that such claims are certain to be successful, or even actionable, but the aims of those laws, which includes protecting identity, are likely more amenable to the concerns of West and others.[212]

B. SAMPLE SONG B

Unlike Sample Song A, Sample Song B presents questions of infringement that, on their face, seem more likely to be answerable with copyright law. While Sample Song B also seems to generally mimic Adele's style in "Someone Like You," it importantly incorporates more than that, particularly by way of a nearly identical melodic hook. As with Sample Song A, it is assumed that Adele owns a valid copyright in both the sound recording and the musical composition of "Someone Like You."[213] Accordingly, Adele would have a potential claim for infringement upon her rights of reproduction, adaptation, distribution, and performance. With valid ownership established, the inquiry begins with the copying requirement as it pertains to the composition.

210. *See* Snapes, *supra* note 4 (following "Heart on My Sleeve," Drake also fell victim to an AI-generated verse added to an Ice Spice song, to which he responded, "[t]his is the final straw AI.").

211. Jennifer E. Rothman, *Navigating the Identity of Thicket: Trademark's Lost Theory of Personality, the Right of Publicity, and Preemption*, 135 HARV. L. REV. 1271, 1272 (2022).

212. There may be barriers in these cases if there is reason for federal copyright law to preempt the rights of publicity. *See generally* Laws v. Sony Music Ent., Inc., 448 F.3d 1134 (9th Cir. 2006) (holding that right of publicity claims were preempted by the Copyright Act because the subject matter of the claim fell within the subject matter of the Copyright Act and the rights asserted were equivalent to those contained in the Copyright Act).

213. As with Sample Song A, this is for the purpose of streamlining the application, even though she likely does not own both herself; *see Detailed Record View: Registration Record PA0001734868*, COPYRIGHT PUB. RECS. SYS., https://publicrecords.copyright.gov/detailed-record/24702018 [https://perma.cc/ESH4-UFW8] (registration record for "Someone Like You" CD).

1. Factual Copying

The trajectory for proving factual copying is much clearer for Sample Song B. On MuseNet, User B specifically selected the introduction from "Someone Like You" by Adele, and that introduction, though slightly modified, is present from the starting note of Sample Song B. If admitted or witnessed, this would constitute direct evidence of factual copying. However, direct proof is often unavailable because "[p]lagiarists rarely work in the open."[214] Nonetheless, it seems very likely that indirect evidence would satisfy this requirement. Regarding access, the theory of widespread dissemination would operate well here. When dealing with songs that have gained notable popularity, plaintiffs have tended to invoke a variety of data points to support theories of widespread dissemination including references to airplay frequency and locations, billboard charts, certifications, record sales, nominations and awards, and royalty revenues.[215] Here, Adele will be able to construct a very convincing claim of widespread dissemination because she can invoke all of these data points with regard to "Someone Like You": the song has been streamed over two billion times on Spotify alone;[216] won several awards, including a Grammy;[217] was certified platinum five times in the United States;[218] and is the twenty-fifth-best-selling song of all time in the United Kingdom.[219] Occasionally, widespread dissemination arguments are accompanied by theories of subconscious copying, which speak to the fact that copyright infringement does not have a scienter requirement.[220] User B did, in fact, see on MuseNet that the intro was "Someone Like You," suggesting this was not subconscious copying. However, the leeway to argue that the use did not need to be with full knowledge of the circumstances may be help Adele's case; at a minimum, if

214. Johnson v. Gordon, 409 F.3d 12, 18 (1st Cir. 2005).

215. Batiste v. Lewis, 976 F.3d 493, 503 (5th Cir. 2020). *See generally* ABKCO Music, Inc. v. Harrisongs Music, Ltd., 722 F.2d 988 (2d Cir. 1983) (pointing to statistics such as weeks on the *Billboard* chart to support a theory of widespread dissemination); Guzman v. Hacienda Recs. & Recording Studio, Inc., 808 F.3d 1031 (5th Cir. 2015) (explaining that the lack of data representing widespread dissemination was problematic for the argument of inferring access).

216. *Adele*, SPOTIFY, https://open.spotify.com/artist/4dpARuHxo51G3z768sgnrY [https://perma.cc/QK28-W7PB].

217. *Grammy Awards 2012: Winners and Nominees*, L.A. TIMES (Mar. 22, 2014), https://www.latimes.com/la-env-grammy-awards-2012-winners-nominees-list-htmlstory.html [https://perma.cc/QH9G-4WFT].

218. *Gold & Platinum*, RIAA, https://www.riaa.com/gold-platinum/?tab_active=default-award&ar=Adele&ti=Someone+like+You&format=Single&type=#search_section [https://perma.cc/668Y-6PJL].

219. *The Best-Selling Singles of All Time on the Official UK Chart*, OFF. CHARTS (Nov. 8, 2023), https://www.officialcharts.com/chart-news/the-best-selling-singles-of-all-time-on-the-official-uk-chart__21298 [https://perma.cc/VQ4J-FNZX].

220. Williams v. Gaye, 885 F.3d 1150, 1167–68 (9th Cir. 2018).

User B does not admit selecting the intro, they cannot invoke a willful blindness-type argument. Therefore, an attempt to rebut the argument of widespread dissemination is unlikely to be persuasive.

As discussed with Sample Song A, substantial probability of access usually needs to be accompanied by probative similarity to successfully prove factual copying with indirect evidence. However, there are instances in which the probative similarity is convincing enough that it alone can satisfy the copying requirement. This is often referred to as "striking similarity," and it arises when the similarity is so extensive that it is "effectively impossible for one to have arisen independently of the other."[221] In analyzing striking similarity in music, it has been held that degree of similarity cannot pertain only to the quantity of identical notes, but must also look to the uniqueness and intricateness of the similar aspects and the places in which the two are dissimilar.[222] Oftentimes, because of how high the bar is set for striking similarity, expert testimony is needed when the subject matter is as highly technical as music. Here, while the melodic hook created by the use of an arpeggio is very recognizable and may seem unique to "Someone Like You," the use of arpeggios generally is common.[223] While there seems to be a possibility that, with the help of an expert, Sample Song B could be found strikingly similar to "Someone Like You," the high bar for such a determination, coupled with the infrequency of successful arguments for striking similarity, makes it reasonable to assume that the normal requirements of access and probative similarity will need to be met; this is not damaging for Adele's claim, as those are almost certainly provable.

Assuming striking similarity is not found, the indirect evidence just needs to show probative similarity. Comparing the two works side-by-side, protected and unprotected elements alike, a factfinder could certainly conclude that "Someone Like You" was the basis, at least in part, for Sample Song B. This holistic comparison would likely highlight the nearly identical melodic hook, which consists of arpeggiated chords and underlies the distinctive harmony, along with the general similarities in terms of the theme and vocal range. While the use of an arpeggio is not itself uncommon and could occur absent copying, the distinctive chord progression, melody, and harmony created in Sample Song B is similar in all the ways that make the

221. 4 NIMMER & NIMMER, *supra* note 91, § 13D.07.

222. *See* Selle v. Gibb, 741 F.2d 896, 903–05 (7th Cir. 1984) (holding that a plaintiff failed to demonstrate striking similarity because there was no testimony to suggest the similarities could not have occurred absent copying); Wilkie v. Santly Bros., 91 F.2d 978, 980 (2d Cir. 1937) (holding that both the differences in the "plan and construction of the compositions" and the use of common "cadences and final chords" were irrelevant given the striking similarity resulting from thirty-two virtually identical bars).

223. *Arpeggio*, *supra* note 14.

instrumental portion of "Someone Like You," so memorable and impactful. While remaining careful about maintaining the distinction between probative and substantial similarity, there is likely enough similarity to be probative of copying; whether that similarity is substantial in a legal sense remains to be addressed.

2. Legal Copying

Substantial similarity is thought of as existing on a spectrum, thereby requiring close examination to attempt to identify the line between trivial similarities and actionable improper appropriation. Here, Adele's infringement action would allege both comprehensive nonliteral and fragmented literal similarity. The most obvious claim is that of literal similarity with regard to the piano phrase, which functions as a melodic hook, because it is reproduced nearly identically in Sample Song B. A potentially important note is that an arpeggio would appear on the sheet music for a composition because it is notated to guide the playing of chord progressions.[224] Further, the use of an arpeggio is key here because it melodizes the chords being used, which tends to then be an important aspect of the resulting harmony; thus, it is potentially very significant to the substantial similarity analysis because arpeggios may take harmony into the protectable range of copyright law.[225] As for nonliteral similarity, this is a situation in which the nonliteral similarity may be characterized as comprehensive; both songs are played in common time, have a somber, emotional sound, and nearly identical lyrical themes, although they are different on a word-for-word basis. As noted, courts use different tests for determining substantial similarity. While these tests are similar in many ways and may yield similar results, the most thorough prediction of how a song like Sample Song B will fare against infringement allegations must consider the nuances of each. Expert testimony is almost always used to help guide complex questions of infringement in music, so any conclusions are subject to elaboration or criticism by a technical expert.

Before applying any of the tests, it is an appropriate moment to address the doctrine of de minimis copying. Because a determination that a use is de minimis negates the need for a full substantial similarity inquiry, courts often address this "defense"[226] at the outset. De minimis copying essentially means there is a lack of substantial similarity, so the conclusion that a use is de

224. *Types of Arpeggio Signs*, STEINBERG.HELP, https://archive.steinberg.help/dorico_pro/v3/en/dorico/topics/notation_reference/notation_reference_arpeggio_signs/notation_reference_arpeggio_signs_types_r.html [https://perma.cc/6S98-98W7].

225. *See Arpeggio*, *supra* note 14.

226. Though sometimes called a defense, it does not necessarily function as such.

minimis generally arises when "the average audience would not recognize the appropriation."[227] It is important to keep this concept separate from that of characterizing an *element* as de minimis itself, such as saying that one note is de minimis and not protectable. As the inverse of substantial similarity, the de minimis inquiry similarly must consider the quantitative and qualitative importance of a use because both get at what an ordinary listener would find substantial. Essentially, the inquiry here would follow the same steps as the fragmented literal similarity test, as that test is viewed as a de minimis doctrine.[228] Because the details of those steps will be discussed in detail in applying the fragmented literal similarity test,[229] they need not be laid out here, largely because it seems unlikely that a court would deem the copying here to be de minimis. The focus of this inquiry is on how much of the original was used or copied; the piano phrase is repeated throughout most of "Someone Like You," so it seems highly likely an audience would recognize the appropriation. Given that the phrase constitutes a quantitatively large part of the original and arguably has significant qualitative importance because the piano is intentionally the only instrument to create a particular feeling, the phrase opens the song instrumentally, and it may be seen as the song's backbone, a determination that this use is de minimis copying seems unlikely. Thus, it is appropriate to analyze potential outcomes under each of the substantial similarity tests.

i. Extrinsic-Intrinsic Test

The extrinsic-intrinsic test is a two-prong test. The extrinsic prong is the objective prong and requires identifying concrete elements of expression that are similar.[230] Because this test is part of a substantial similarity inquiry, the dissection of elements involves identifying those that are and are not protected by copyright. Music often presents a more complicated case for analysis because, unlike books and films, it cannot easily be classified into a

227. Newton v. Diamond, 388 F.3d 1189, 1193 (9th Cir. 2004) (citation omitted) (holding that the use of three notes that constitute about six seconds in the original song was a de minimis use and therefore not actionable).

228. *See* Warner Bros. Inc. v. Am. Broad. Co., 720 F.2d 231, 242 (2d Cir. 1983) (explaining that in cases of fragmented literal similarity, a de minimis rule applies and allows "the literal copying of a small and usually insignificant portion of the plaintiff's work"); Williams v. Broadus, No. 99 Civ. 10957, 2001 U.S. Dist. LEXIS 12894, at *11 (S.D.N.Y. Aug. 24, 2001) (calling fragmented literal similarity a "*de minimis* doctrine").

229. *See infra* Section II.B.2.iii.

230. Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157, 1164 (9th Cir. 1977) ("[Specific] criteria include the type of artwork involved, the materials used, the subject matter, and the setting for the subject."), *overruled on other grounds by* Skidmore v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (overruling the use of the inverse ratio rule).

few protectable and unprotectable elements;[231] thus, courts applying the extrinsic prong have looked to a wide variety of elements, including title hooks, lyrics, melodies, chord progression, pitch, instrumentation, accents, and basslines.[232] The combination of these expressive elements can be protected by copyright and often form the basis of claims involving instrumental phrases.[233] Therefore, it can be helpful to think of the first question as relating to separating protectable elements or compilations of elements, and the second question as analyzing those elements to determine whether they are objectively substantially similar. In *Skidmore v. Led Zeppelin*, the district court concluded on a summary judgment motion that there was sufficient extrinsic similarity for the issue to go to the jury; the basis for such similarity focused on a "repeated A-minor descending chromatic bass lines lasting [thirteen] seconds" that appeared within the first two minutes of both songs and was arguably the "most recognizable and important segments of the respective works."[234] Additionally, the "harmonic setting" of the sections used the same chords.[235] The court concluded that even though a "descending chromatic four-chord progression" is common, the placement in the song, pitch, and recognizability make it appropriate for analysis under the extrinsic test.[236] Ultimately, however, the jury concluded that, despite the combination of objective similarities, the songs were not extrinsically similar. The jury reached a different conclusion in *Three Boys Music Corp. v. Bolton*, in which the jury found substantial extrinsic similarity in the compilation of five unprotectable elements.[237]

Here, Adele could likely make an argument similar to that of the plaintiffs in both *Skidmore* and *Three Boys Music*, arguing that although arpeggiating chords to achieve certain melodic or harmonic goals is not uncommon, the very same chord progression starts both songs without lyrical accompaniment, is repeated several times in both songs at the same

231. Swirsky v. Carey, 376 F.3d 841, 848–49 (9th Cir. 2004). Literary works, including films, TV shows, and books, can be broken down into elements more easily than music because relevant elements like plot, character, event sequence, and dialogue are more discrete than elements like melody or harmony. *Id.* at 849 n.15 (citation omitted).

232. *Id.* at 849; *see also* Three Boys Music Corp. v. Bolton, 212 F.3d 477, 485–86 (9th Cir. 2000) (upholding jury's finding of infringement based on compilation of unprotectable elements of a song), *overruled on other grounds by* Skidmore v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (overruling the use of the inverse ratio rule).

233. *Swirsky*, 376 F.3d at 848–49.

234. Skidmore v. Led Zeppelin, No. CV 15-3462, 2016 U.S. Dist. LEXIS 51006, at *50 (C.D. Cal. Apr. 8, 2016), *aff'd,* 952 F.3d 1051 (9th Cir. 2020).

235. *Id.*

236. *Id.*

237. In *Three Boys Music*, an expert testified to the similarity in the combination of "(1) the title hook phrase (including the lyric, rhythm, and pitch); (2) the shifted cadence; (3) the instrumental figures; (4) the verse/chorus relationship; and (5) the fade ending." 212 F.3d at 485.

pitch, and is "arguably the most recognizable and important"[238] part of each work; invoking the device that made the *Three Boys Music* plaintiffs successful, Adele would want to emphasize that it is the compilation of expressive elements that form the basis of actionable extrinsic similarity. While the knowledge that MuseNet took the actual intro from "Someone Like You," and used generative AI to make "predictions" for the rest of the song according to prompts suggests objective similarity of these elements, expert testimony would still be helpful and needed to confirm which elements are really present in Sample Song B; for example, there may be subtle note differences that do not necessarily make the song *sound* different, but are objective differences, nonetheless.[239] This conclusion is ultimately a question of fact requiring technical breakdown by an expert to evaluate the compilation of expressive elements, including those that are part of the melodic hook, for originality. Based on this analysis, a jury can make an informed determination as to whether these elements are sufficiently original to be protected, and if so, whether Sample Song B is substantially similar with regard to that protected expression. Assuming an expert can corroborate the objective similarity that appears to exist, there seems to be a strong case against User B as it pertains to the extrinsic prong. This is especially true in light of cases in which experts found extrinsic similarity in hooks and signature phrases,[240] as well as those that emphasized compilations as sufficient for extrinsic similarity.[241] Within this framework, the copied melodical hook—consisting of the same or at least similar chord progressions, use of arpeggio, pitch, and harmony—coupled with the prominence and similar repetition in both songs, sets up a strong claim for extrinsic similarity.

Importantly in the context of AI-generated music, Adele may want to point to the fact that the song is "in her style" and that the voice sounds very similar to hers. As discussed with Sample Song A, however, courts have been very reluctant to recognize copyright in a style or someone's voice. Especially in the case of Sample Song B—which is even closer to what has been identified as a soundalike in past cases, as Adele's voice is not being used at all—it is at most an imitation of her voice type, and thus it seems unlikely that this part of the similarity between the songs could be actionable

238. *Skidmore*, 2016 U.S. Dist. LEXIS 51006, at *50.

239. Because generative AI music technology is still being explored, expert testimony as to the specifics of the musical elements would likely be needed because it is not clear whether selecting the "Someone Like You" intro means that it is being copied and pasted into the new song, or if it is instead composing something that closely resembles the phrase. The fact that the generated song has an almost identical-*sounding* piano phrase is addressed in the intrinsic prong.

240. *See, e.g.*, Williams v. Gaye, 885 F.3d 1150, 1172 (9th Cir. 2018).

241. *See, e.g.*, *Three Boys Music*, 212 F.3d at 485.

itself.[242] However, this similarity may work to Adele's benefit under the intrinsic test.

If satisfied, the extrinsic test must be followed by an intrinsic test, which is the subjective prong that puts aside analytical dissection in favor of taking the approach of a reasonable listener. The intrinsic test asks whether ordinary listeners would find the "total concept and feel of the works to be substantially similar."[243] A jury may find substantial similarity from an overall view, even when individual similarities alone seem trivial.[244] This may be important for Adele's case because the similarity technically boils down to a few chords and how they are played. However, the impact of the arrangement resulted in an internationally recognized piano phrase, as well as a melody and harmony that have been highly successful in conveying a message. In both songs, the phrase starts at the first second, plays without lyrics initially, and repeats after the chorus. While there are some differences in instrumental content and lyrics, a jury could subjectively find that the repeated phrase is substantial. The ordinary listener would likely also find subjective similarity in the combination of those instrumental choices and thematically similar lyrics, suggesting that the songs genuinely evoke similar meanings. In a subjective analysis of the total concept and feel, the similar-sounding vocals may potentially factor in, particularly because both songs are sung by mezzo-sopranos. However, this is unlikely to be the most salient reason for finding intrinsic similarity because mezzo-soprano is the most common female singing voice, and the intrinsic test assumes an untrained ear who would likely attribute the similarity to the unremarkable fact that both vocalists sound feminine, rather than recognizing the specific vocal range.[245] Nonetheless, it seems reasonable to conclude that the songs are substantially similar overall. But because the ordinary listener is supposed to truly reflect an ordinary person with no music expertise, it could also go the other way. While the hook phrase is distinctive and impactful, a jury could conclude that in Sample Song B, because of the variation in the accompaniment aside from the phrase, it is not as salient, therefore finding that the works holistically lack the requisite similarity. This ultimately speaks to the challenging nature of anticipating intrinsic analysis results, as

242. Unlike Sample Song A, in which West's voice was used in some way to create the vocals for the AI-generated song, User B just used vocals that were in a similar mezzo-soprano voice. While the practical result is that it sounds like Adele, this seems like a classic case of a soundalike. *See generally* Midler v. Ford Motor Co., 849 F.2d 460 (9th Cir. 1988).

243. *Three Boys Music*, 212 F.3d at 485 (quoting Pasillas v. McDonald's Corp., 927 F.2d 440, 442 (9th Cir. 1991)).

244. *Gaye*, 885 F.3d at 1164.

245. Stefan Joubert, *7 Vocal Types and How to Determine Yours*, LONDON SINGING INST. (Oct. 30, 2020), https://www.londonsinginginstitute.co.uk/7-vocal-types-and-how-to-determine-yours [https://perma.cc/M3TL-24LF].

the conclusions depend on unknown variables and subjective judgments. Courts consistently reiterate that they will not question the jury's intrinsic conclusions, therefore there is less to rely on by way of case law because it is not judges who engage in this inquiry.[246]

The extrinsic-intrinsic test has been criticized for lack of clarity as to both prongs. As will also be discussed with aspects of the following tests, the "total concept and feel" approach seems to conflict with copyright law's very specific intent to protect original expressions rather than ideas or commonplace expressions of ideas.[247] Assuming this test remains in use, however, it may be the approach applied in the litigation of User B. Without knowing the quality of potential expert testimony, it is hard to predict with certainty the outcome. However, case law does suggest that the type of elements that were copied could, if framed as a compilation, satisfy the extrinsic test because there are clearly musical elements that are objectively the same. As for the intrinsic test, the subjective conclusions of the factfinder will ultimately determine the outcome; however, the prominence of the copied phrase, as well as the concept and feel of the emotional ballads, suggest that a jury could potentially find the songs to be substantially similar.

ii. Ordinary Observer Test

The ordinary observer test asks "whether defendant took from plaintiff's works so much of what is pleasing to the ears of lay listeners, who comprise the audience for whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff."[248] Here, because there are similarities between protectable and unprotectable elements, the test will probably be more discerning. In conducting the more discerning inquiry, courts are to try to extract the unprotectable elements and ask whether the remaining protectable elements are substantially similar.[249] Protectable elements may either be completely original or original contributions by way of selection, coordination, or arrangement.[250] For Adele, this would likely mean focusing on the original selection, coordination, and arrangement of the piano phrase itself and its function in the song through repetition. Once those elements are identified,

246. *See generally Gaye*, 885 F.3d; Swirsky v. Carey, 376 F.3d 841 (9th Cir. 2004); *Three Boys Music*, 212 F.3d; Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157 (9th Cir. 1977), *overruled on other grounds by* Skidmore v. Led Zeppelin, 952 F.3d 1051 (9th Cir. 2020) (overruling the use of the inverse ratio rule).

247. 4 NIMMER & NIMMER, *supra* note 91, § 13.03(A)(1)(c).

248. Arnstein v. Porter, 154 F.2d 464, 473 (2d Cir. 1946).

249. Velez v. Sony Discos, No. 05 Civ. 0615, 2007 U.S. Dist. LEXIS 5495, at *24 (S.D.N.Y. Jan. 16, 2007).

250. *Id.* ("In other words, unoriginal elements, combined in an original way, can constitute protectible elements of a copyrighted work.").

the factfinder will look to the total concept and feel, focusing on whether the defendant misappropriated the original aspects of the copyright owner's work. While the original formulation of the ordinary observer test in *Arnstein v. Porter* references the intended audience, that factor has not typically played a large role and is usually understood to mean the lay listener.[251] Because the emphasis is almost entirely on total concept and feel, whether MuseNet made minor, audibly imperceptible changes to the phrase may be less important than in the extrinsic inquiry of the extrinsic-intrinsic test.[252]

The analysis of Sample Song B under an ordinary observer test will likely resemble the analysis in *New Old Music Group, Inc. v. Gottwald*.[253] In *New Old Music*, the infringement claim was based on a drum part consisting of a single measure, which was repeated throughout the allegedly infringing work, ultimately accounting for eighty-three percent of the original work.[254] The defendant argued that the individual elements were not sufficiently original to be protected, but the court held that the totality of the drum part could suffice as copyrightable based on its original selection, coordination, and arrangement.[255] A reasonable juror in *New Old Music* could have concluded that the use of the drum part, which could be seen as the original song's "backbone," took so much of "what is pleasing to the ears of lay listeners, . . . that [the] defendant wrongfully appropriated something" from the plaintiff.[256] Here, the repeated piano phrase could be described as the backbone of "Someone Like You," and be protected as a unique and original arrangement despite the unoriginality of any individual note. Analyzing the total concept and feel of both songs, a reasonable jury could likely conclude User B substantially misappropriated Adele's original compilations and thereby infringed on her copyright.

Because this test relies on subjective judgments, the outcome could go the other way. A jury could conclude that the piano phrase and its

251. *Arnstein*, 154 F.2d at 473; *see* Dawson v. Hinshaw Music, Inc., 905 F.2d 731, 737 (4th Cir. 1990) (suggesting that a departure from the lay audience serving as the representative of the intended audience is appropriate only when "the intended audience possesses specialized expertise") (internal quotation marks omitted).

252. It may also not be any less important depending on testimony. However, since the focus is so much more directly on whether the second work took something important from the first, these minor changes may factor in much less. Nevertheless, this potential small change would not be fatal to the claim, because we are discussing substantial similarity of the composition, meaning that it need not be completely identical.

253. New Old Music Grp., Inc. v. Gottwald, 122 F. Supp. 3d 78, 95–97 (S.D.N.Y. 2015).

254. *Id.* at 97.

255. The court in *New Old Music* was ruling on a summary judgment motion, so it did not determine whether the selection, coordination, or arrangement of the drum part was sufficiently original. Instead, it simply pointed to the defendant's failure to show that it *was not* original and emphasized that protection for the plaintiff is not limited to the originality of the individual elements. *Id.* at 95–96.

256. *Id.* at 97 (quoting Repp v. Webber, 132 F.3d 882, 889 (2d Cir. 1997)).

arrangement were not original,[257] or that it is a de minimis aspect of the work[258] and therefore the similarity does not pertain to what lay listeners deem pleasing in "Someone Like You." This was the case in *Velez v. Sony Discos*, in which the combination of eight-measure phrases was a structure widely used and therefore not original to the plaintiff's song, and also constituted de minimis aspects of the original song.[259] Sample Song B differs from the allegedly infringing song in *Velez* in that, aside from that structure of phrases, the song was not otherwise similar to the original in melody, harmony, or lyrics;[260] Sample Song B, on the other hand, can be alleged to infringe on the arrangement of piano phrases, as well as the resulting melody and harmony that is affected by other expressive choices like arpeggiating the chords. Because of these similarities, it seems likely that a jury could find for Adele under the ordinary observer test, assuming expert testimony does not exclude the possibility of originality.

A key reason the ordinary observer test, discerning or traditional, comes under criticism is that it asks a factfinder to simultaneously separate protectable elements for careful examination and determine substantial similarity based solely on the total concept and feel.[261] Additionally, ordinary listeners' impressions regarding whether copying has occurred do not necessarily prove that a violation of the Copyright Act has taken place. These shortcomings could affect Adele's case against User B in two opposing ways. On one hand, the meticulous separation of protectable elements before conducting a net effect-type of analysis might lead the jury to conclude that what they are merely dealing with individual phrases. Focusing too closely on the individual phrases, as opposed to the whole arrangement, might cause this similarity to be overlooked in a total concept and feel inquiry. If, however, the jury recognizes the arrangement as the "backbone" of the song, this could lessen the issue. Further, in focusing on the total concept and feel, a jury might unintentionally be overinclusive when the vibe of the songs is as similar as "Someone Like You" and Sample Song B. If anything, this emphasizes the importance of expert testimony regarding the originality, or lack thereof, of the elements—whether on their own or as

257. To determine the selection or arrangement of the piano in "Someone Like You," is unoriginal, evidence must be presented that suggests as much. While nothing readily apparent suggests this upon researching the song, that does not preclude the possibility that an expert in music and music theory could demonstrate its unoriginality.

258. The term "de minimis" in this context refers to the violation being trivial; this differs slightly from "de minimis copying," a term used to describe copying that falls below the substantial similarity threshold. *See* Ringgold v. Black Ent. Television, Inc., 126 F.3d 70, 74 (2d Cir. 1997).

259. Velez v. Sony Discos, No. 05 Civ. 0615, 2007 U.S. Dist. LEXIS 5495, at *38–40 (S.D.N.Y. Jan. 16, 2007).

260. *Id.* at *39.

261. 4 NIMMER & NIMMER, *supra* note 91, § 13.03(E)(1)(b).

a compilation—to guide the jury before their total concept and feel analysis.

iii. Fragmented Literal Similarity Test

The last test is the fragmented literal similarity test, which has less applicable case law. This test focuses on "localized" similarity based on the idea that identifiable fragments of identical or nearly identical expression should be the basis for an infringement action.[262] As such, the substantial similarity question under this test turns on whether the copying involves trivial or substantial elements of the original work, which is determined by quantitative and qualitative assessments.[263] Most cases specifically addressing fragmented literal similarity involve lyrics, so the qualitative significance of instrumental phrases is less explored. However, when considering the qualitative importance of instrumental phrases outside the context of fragmented literal similarity, it has been recognized that small sections can have great qualitative import, such as the four-note opening melody in Beethoven's Fifth Symphony.[264] Here, the specific piano phrase appears at the first second of "Someone Like You," initially without lyrics for about fourteen seconds; the same phrase continues through nearly three and a half minutes of the song, although there are some additional notes played and volume changes.[265] Quantitatively, this is clearly significant. In *TufAmerica, Inc. v. Diamond*, the court determined that a "distinctive orchestra sequence" from the original song that was about three seconds and consisted of "a series of five punchy ascending chords" was quantitatively significant given that it was repeated seventeen times to ultimately constitute about fifteen percent of the song.[266] While a musical expert would need to confirm the actual length of time the phrase appears in original form in "Someone Like You," it certainly seems to exceed that threshold. The qualitative importance also seems convincing given that the piano is the only instrument, the phrase opens the song instrumentally, making it very recognizable, and the phrase continues with only slight alterations, thereby functioning as a common thread through the whole work. Under this test, it seems highly likely Adele would prevail.

262. TufAmerica, Inc. v. Diamond, 968 F. Supp. 2d 588, 597 (S.D.N.Y. 2013).

263. *Id.* at 598.

264. Newton v. Diamond, 388 F.3d 1189, 1197 (9th Cir. 2004) (Graber, J., dissenting). *See generally* Williams v. Broadus, No. 99 Civ. 10957, 2001 U.S. Dist. LEXIS 12894 (S.D.N.Y. Aug. 24, 2001); Jarvis v. A & M Recs., 827 F. Supp. 282 (D. N.J. 1993).

265. A trained musical expert would need to testify as to the specific breakdown of how long the *exact* same chords are played, but the progression is present through approximately three and a half minutes of the song. "Someone Like You" is four minutes and forty-five seconds in total. *Someone Like You*, SPOTIFY, https://open.spotify.com/track/5lkpeJwmQKgY3bX2zChjxX [https://perma.cc/RJ2Z-XZLW].

266. *TufAmerica*, 968 F. Supp. 2d at 606–07.

However, this test seems least likely to apply. First, it is not as commonly used as the other tests. Second, there is much more at issue than just fragmented literal similarity, especially considering that the desire to legally target Sample Song B likely has as much to do with the fact that User B used AI to create a song that intentionally sounds like Adele as it has to do with the use of the phrase; "local" *and* "global" similarity are expected concerns for artists whose works are pirated by AI. Third, the fact that the phrase is slightly sped up and may contain slight differences due to how it was generated suggests the other tests may be better suited for this case.

User B's final opportunity to argue that their conduct falls within the bounds of the Copyright Act without constituting infringement is by asserting the fair use defense. Because the same analysis likely applies to User B's use of the recording as well, the fair use discussion below addresses both components of the song together.

3. The Sound Recording

The analysis thus far has focused on the composition. Infringement of the sound recording of "Someone Like You" requires a literal duplication of the recording.[267] Based on the language of the Copyright Act, whether the rights in the recording have been infringed depends entirely on how MuseNet creates music using introductions from existing songs:

> (a) The exclusive rights of the owner of copyright in a sound recording are limited to the rights specified by [the] clauses [pertaining to the reproduction, adaptation, distribution, and the public performance by digital audio transmission rights] . . . . (b) The exclusive right of the owner of copyright in a sound recording under [the reproduction right] is limited to the right to duplicate the sound recording in the form of phonorecords or copies that directly or indirectly recapture the *actual sounds fixed in the recording*. The exclusive right of the owner of copyright in a sound recording under [the adaptation right] is limited to the right to prepare a derivative work in which the *actual sounds fixed in the sound recording* are rearranged, remixed, or otherwise altered in sequence or quality.[268]

MuseNet trains on MIDI files, which capture data that can be seen as a "symbolic representation of music."[269] Essentially, a MIDI file records data about the notes in a song, including pitch, volume, and time nodes, which

267. 17 U.S.C. § 114(b). As discussed earlier, while not explicitly included, there is reason to believe the same applies to the distribution right as well; *see supra* text accompanying note 117.

268. 17 U.S.C. § 114(a)–(b) (emphasis added).

269. David Rizo, Pedro J. Ponce de León, Carlos Pérez-Sancho, Antonio Pertusa & José M. Iñesta, *A Pattern Recognition Approach for Melody Track Selection in MIDI Files*, 7TH INT'L CONF. ON MUSIC INFO. RETRIEVAL (2006).

can then instruct the reproduction of musical compositions.[270] Importantly, MIDI files are not audio recordings and cannot transmit audio.[271] This means that, unlike Uberduck, MuseNet technically never even "hears" the sound recording; it only trains on the computer language that indicates how the composition is played. Therefore, a MIDI file of "Someone Like You" could not possibly result in exact duplication of the protected recording being used in Sample Song B because the recording itself is not transmitted. This information alone suggests that User B cannot be liable for infringement of the sound recording of "Someone Like You," and Adele would have to rely on allegations of infringement of the composition as discussed earlier.

While the literal language of the statute suggests that copying using a MIDI file is not an actionable infringement of the recording, a more in-depth inquiry as to whether this is so black-and-white is warranted considering that many AI music generators train on MIDI files. The starting point for this inquiry is legislative intent. The Digital Performance Right in Sound Recordings Act of 1995 ("DPRA") created an exclusive performance right for sound recordings, specifically granting the right to perform by "means of a digital audio transmission."[272] In doing so, section 114 was also amended to add the relevant limitations on the performance right. The House Report accompanying the DPRA explicitly states that the right applies only to digital audio transmissions, which is consistent with the language of section 114 concerning reproduction and adaptation rights.[273] Additionally, it specifies that a "digital phonorecord delivery" refers to the delivery of a recording by digital transmission.[274] From this, it is clear that while the rights associated with sound recordings were expanded to adapt to technological developments, they were not explicitly extended beyond the transmission of the actual recording. However, the House Report does note that because the bill does not "precisely anticipate particular technological changes," they intend that the rights, exemptions, and limitations created should be interpreted to "achieve their intended purposes."[275] This is at least suggestive of the understanding that the language may not be precise enough to cover all technologies and potential infringements. In 2018, Congress passed the Musical Works Modernization Act with the intent of updating copyright law

270. Liu, *supra* note 29, at 6564; Christos P. Badavas, *MIDI Files: Copyright Protection for Computer-Generated Works*, 35 WM. & MARY L. REV. 1135, 1140–41 (1994).

271. Badavas, *supra* note 270, at 1139. ("The gestures made on a keyboard are translated into the serial computer language that is MIDI, sent out of the MIDI Out port, are received at the MIDI In port of a second (and third, and fourth, ad infinitum) instrument, and that instrument faithfully reproduces those gestures.").

272. 17 U.S.C. § 106(6).

273. H.R. REP. NO. 104-274, at 14 (1995).

274. *Id.* at 28.

275. *Id.* at 13.

to increase fairness for creators regarding statutory licensing.[276] While this points to an ongoing concern about protecting artists in the advent of technological innovation, it does not change how digital transmission is defined. Legislative intent seems to indicate that Congress's focus is to protect the actual sound recording. However, the concern about the future evolution of technology nonetheless remains relevant.

The Office has also provided some perspective on MIDI files and the sound recording requirement. As of 2021, the Office "does not consider standard [MIDI] files to be phonorecords and will not register a copyright claim in a sound recording contained in a standard [MIDI] file."[277] The Office elaborates that, because MIDI files do not capture sounds and only capture the underlying score, they are insufficiently fixed to be copyrighted as sound recordings, though they may suffice for musical works.[278] While this does not directly address MIDI files in the context of *infringement*, this is clear evidence that the Office is aware of how MIDI files operate in the music context and continues to view them as fundamentally different from sound recordings. If the Office does not consider MIDI files to be fixations of the recording itself, it is a difficult argument to suggest it should constitute a sound recording for the purposes of infringement.

Case law does not seem to have addressed this issue directly. However, there is a wealth of judicial interpretation of section 114 and what is meant by the requirement that sound recordings be duplicated to qualify as infringement.[279] This conclusion aligns with the language of the statute and its intended purpose. Therefore, even if Sample Song B sounds like it was sampled, current interpretations of the Copyright Act would instruct a court to conclude that Sample Song B did not infringe on Adele's exclusive rights in the sound recording of "Someone Like You." Undeniably this would be incredibly frustrating for an artist in Adele's shoes; changing one fact—how the song was duplicated—could open the door to receiving royalties for sampling. This bears similarity to the frustration artists feel in cases involving songs like Sample Song A in which they justifiably feel that their

276. Musical Works Modernization Act §§ 101–106; 17 U.S.C. §§ 114, 115.

277. U.S. COPYRIGHT OFF., COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 803.4(C) (3d ed. 2021).

278. *Id.*

279. *See* Bridgeport Music, Inc. v. Dimension Films, 410 F.3d 792, 800 (6th Cir. 2005) ("[17 U.S.C. § 114(b)] means that the world at large is free to imitate or simulate the creative work fixed in the recording so long as an actual copy of the sound recording *itself* is not made.") (emphasis added); VMG Salsoul, LLC v. Ciccone, 824 F.3d 871, 883 (9th Cir. 2016) ("A new recording that mimics the copyrighted recording is not an infringement, even if the mimicking is very well done, so long as there was no actual copying."); Batiste v. Lewis, 976 F.3d 493, 506 (5th Cir. 2020) ("[A]n artist infringes a copyrighted sound recording by sampling all or any substantial portion of the actual sounds from that recording.") (citation omitted) (internal quotation marks omitted).

hard work has been "appropriated," yet that appropriation is simply not cognizable under current copyright law.

However, given that this case presents new issues that have not yet been addressed directly, it is possible that using the original in this specific way could be considered an exact duplication. Based on the DPRA and Congress's intent to protect the ability to earn royalty revenues in the digital age, it may be a fair extension to consider the extraction and use of exact portions of a song using MIDI technology to be within what was meant by an actual duplication. There is no human involvement in using MIDI files to recreate the exact instrumentals; they are fed to the AI system to learn, train on, and reproduce with predictions. By possessing the MIDI file, the system autonomously makes an exact replica of the song. In fact, the point of MIDI files is to enable the creation of exact replicas, as it is a type of file that can direct notes and instruments to be played. While that seems to sound like a process akin to a person who uses their own instrument to recreate a song, which is acceptable under the Copyright Act, the lack of human involvement may persuade a court to conclude that this process falls outside the scope of what Congress intended to allow without obtaining a license.

If this is considered to be sampling, there are several potential rights for Adele to argue infringement upon; by its very nature, sampling may infringe on the reproduction and distribution rights, and courts have found that sampling infringes on the adaptation right by harming the market for future derivatives.[280] In determining whether this sample infringed on those rights, courts would likely apply the same requirements for a successful infringement action. The only instance in which the fact of sampling alone would be sufficient is if a court strictly adheres to the holding and reasoning from *Bridgeport*. Because this would be considered an exact duplication, the factual copying prong would easily be satisfied. As to the legal prong, it seems that Sample Song B would likely be found to be substantially similar to "Someone Like You" for the same reasons as discussed regarding the musical composition. Further, the fair use inquiry would be important in determining whether User B is liable for infringing Adele's copyright.

Absent such a change in interpretation or amendment of the Copyright Act, it seems unlikely that Adele would succeed on a claim of infringement on the sound recording. Given that AI systems often train on MIDI data, this is something that may be addressed in the Office's future reports. While arguments about style pirating by generative AI systems seem unlikely to influence changes in copyright protections, arguments about near-

280. Frisby v. Sony Music Ent., No. 19-1712, 2021 U.S. Dist. LEXIS 51218, at *40–41 (C.D. Cal. Mar. 11, 2021).

duplication by MIDI files align more with adjusting copyright law to address technological changes. Ongoing concerns about royalties and protecting rights in ownership of a sound recording may demand attention to this MIDI "loophole." Because this situation presents a good opportunity to reconsider what exactly is meant by exact duplications, it is worth considering how Adele's infringement action would proceed if User B's use of MIDI files does qualify as sampling. Since the required elements of an infringement cause of action are likely satisfied, the outcome for the recording probably depends on fair use, as that is User B's last opportunity to attempt to show that their conduct is not prohibited by the Copyright Act.

4. Fair Use Defense

Regarding both the musical composition and the sound recording, User B will likely at least plead fair use in their answer to a suit alleging infringement by Adele. Nevertheless, like other music copyright cases, it is not guaranteed that this defense will be litigated. In asserting a fair use defense, User B will have the burden of justifying their use of the original phrase, including its intact melody, harmony, and rhythm. If successful, they will be relieved from liability because fair use is an affirmative defense.[281] Because there are only a handful of fair use music cases that involve non-parody uses, with a notable absence of case law addressing the use of instrumental sections, the following analysis largely relies on analogies to other applications of the defense.

The first factor is the "purpose and character" of the use.[282] The key question is one of transformation. Post-*Goldsmith*, this inquiry is more demanding and requires looking beyond whether the use adds something new. When the use is essentially the same as the original, as is the case here, a compelling justification is required.[283] There is certainly an argument that the use here is transformative, simply based on the nature of MuseNet and the resulting composition. The intro to "Someone Like You" served as the basis for Song B, but then the AI system used predictive technology to construct much of the remaining composition, revisiting the original phrase only occasionally. In a literal sense, User B, via MuseNet, transformed the phrase by pairing it with new instrumental phrases. While this fits the definition of literal transformation, a more compelling argument would exist if the song retained less of the original in its essentially unchanged form. Since most uses incorporate some addition, the inquiry must also consider

281. 17 U.S.C. § 107.
282. *Id.* § 107(1).
283. Andy Warhol Found. for the Visual Arts v. Goldsmith, 598 U.S. 508, 547 (2023).

the extent to which the purpose differs.[284] Sample Song B does not fit into any of the criteria from the preamble of § 107,[285] but that does not preclude a sufficiently different purpose. In *Estate of Smith*, the court found that the use of lyrics to discuss music generally served a "sharply different" purpose than the lyric's original purpose or goal of commenting on the "primacy of jazz music."[286] Whether this conclusion would be accepted under *Goldsmith*, which was decided later, is questionable because the Court held that transformation cannot be based on the "stated or perceived intent of the artist."[287]

Regardless, while there are changes in the instrumental phrasing and added lyrics, the lyrics reflect very similar themes, and the music serves the same purpose of setting a somber tone. While more specifics about the lyrics and the message of Sample Song B are needed to confirm this conclusion, the available information suggests that the purpose of using the piano phrase is not even as different as that of the use in *Estate of Smith*, which also arguably lacked significant differences. Because of the exact portions of piano used, along with several other nonliteral similarities, it seems unlikely that User B could sufficiently demonstrate a compelling justification or a distinct purpose. The *Goldsmith* Court noted that *Campbell* cannot be read to say that any use that adds something new counts in favor of fair use because, if it did, a "commercial remix of Prince's 'Purple Rain'" would weigh in favor of fair use purely because it added some new expression to the song.[288] Thus, Sample Song B is arguably just a remix of the instrumentals in "Someone Like You," which fails to serve any significant unique purpose because it uses the phrasing to evoke the same theme and musical vibe. Therefore, it seems unlikely that a court would find the first factor to favor fair use here.

The second factor is "the nature of the copyrighted work."[289] This factor examines whether the work is creative or expressive.[290] This factor weighs strongly against fair use because the copyrighted work is an original, creative musical work. Because this is somewhat uncharted territory, User B could argue that the creative nature of the original song is less relevant because

284. *Id.* at 525.

285. The preamble explicitly lists the following purposes: "criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research." 17 U.S.C. § 107.

286. Estate of Smith v. Cash Money Recs., 253 F. Supp. 3d 737, 750 (S.D.N.Y. 2017). The original lyrics were: "Jazz is the only real music that's gonna last. All that other bullshit is here today and gone tomorrow. But jazz was, is and always will be." In the second work, the lyrics were edited to say: "Only real music is gonna last." *Id.* at 749.

287. *Goldsmith*, 598 U.S. at 545.

288. *Id.* at 541.

289. 17 U.S.C. § 107(2).

290. *Estate of Smith*, 253 F. Supp. 3d at 751.

what was used can be broken down into a chord progression, and there are only so many combinations of such progressions; User B may then argue that courts should look at these chords more like facts or nonfiction works. This argument is not particularly persuasive given that Sample Song B uses the same arrangement of the chord progressions, maintaining the original melody and harmony, which clearly speaks to the creative choices made in "Someone Like You." Nonetheless, this factor is rarely significant in a final fair use determination.[291]

The third factor pertains to the "amount and substantiality of the portion used in relation to the copyrighted work as a whole."[292] User B will certainly argue that they used only what was required for the generative AI system to create predictions and compose a new song in accordance with those predictions. While User B is not required to use only the minimum amount needed for the system to function,[293] the significant amount used, coupled with the lack of obvious transformation in the resulting song, will likely work against them. This factor is less likely to favor fair use when there is extensive copying or when the use encompasses "the most important parts of the original."[294] While in *Oracle*, the amount of code used was reasonable in proportion to the transformative use,[295] the use of exact news segments in *Fox News Network, LLC v. TVEyes, Inc.* was extensive and included all of the important parts of the original news segments, thereby failing to qualify as fair use.[296] User B's use of the piano phrase likely falls between these two cases, as it does not use the entire composition, but still uses so much of what is important from it. As with the other two factors, this factor would likely count against fair use here.

The final factor, often deemed the most important, asks about the "effect of the use upon the potential market for or value of the copyrighted work."[297] This factor requires looking beyond the immediate situation to consider whether widespread conduct of this kind "[might] adversely affect the potential market for the copyrighted work."[298] As noted earlier, this factor's application in the music context is unclear, as it has received little judicial attention. Since the use is unlikely to be deemed transformative,

291. Authors Guild v. Google, Inc., 804 F.3d 202, 220 (2d Cir. 2015).
292. 17 U.S.C. § 107(3).
293. *Estate of Smith*, 253 F. Supp. 3d at 751.
294. *Authors Guild*, 804 F.3d at 221.
295. Google LLC v. Oracle Am., Inc., 593 U.S. 1, 33–35 (2021).
296. Fox News Network, LLC v. TVEyes, Inc., 883 F.3d 169, 179 (2d Cir. 2018).
297. 17 U.S.C. § 107(4).
298. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 451 (1984), *superseded by statute*, Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860, *as recognized in* Monge v. Maya Mags, Inc., 688 F.3d 1164 (9th Cir. 2012).

Song B is more likely to pose a risk of market substitution. However, this conclusion is based on an approach that is not typically applied to music cases like this one. User B will certainly argue that listening preferences are subjective and the use of the piano phrase to create a similarly emotional ballad may not clearly harm the market for the original the way the complete replication of news segments and distribution of clips would render paying for the original largely unnecessary.[299] However, a California court, addressing an allegedly infringing song in *Frisby*, held that two songs within similar genres were competitors; as such, the court concluded that when a latter song copies important elements of the original, the value and sales of the original are expected to be diminished because "the copy supersedes the objects of the original creation thereby supplanting [it]."[300] Sample Song B is clearly within the same genre as "Someone Like You," so a court may deem them to be market competitors. Assuming these two songs qualify as market competitors, the subsequent question becomes whether Sample Song B copies an important element of "Someone Like You," thereby supplanting the original. For the reasons discussed throughout this Note, the copied piano phrase is clearly a critical part of "Someone Like You," as it is recognizable and serves as the instrumental accompaniment for most of the song. If a court agrees with this determination of importance, it will likely count against fair use.

The court in *Frisby* further explained the importance of considering the market for derivative works that may be affected by a later use; in that case, the court found that if the sample were considered fair use, it would "destroy the market for derivative works based on [the original song]."[301] While that conclusion was linked to the existence of a "flourishing market" for derivatives of the original song,[302] the premise that such a decision would result in future users not bothering to pay licensing fees would still apply here, even if there is no such flourishing market for "Someone Like You." Fair use cases pertaining to all types of work often consider the potential chilling effects on the market. Finding Sample Song B's use to be fair use could certainly undermine the efficacy and profitability of an established system of licensing.[303] By referencing sound recordings, the DPRA reflects

299. *Fox News*, 883 F.3d at 179–180.

300. Frisby v. Sony Music Ent., No. 19-1712, 2021 U.S. Dist. LEXIS 51218, at *40 (C.D. Cal. Mar. 11, 2021).

301. *Id.* at *41.

302. *Id.*

303. *See, e.g.*, *id.* at *41–42 ("[F]inding fair use in this case would have an extremely adverse effect on the potential market for and value of [the original]."); *Fox News*, 883 F.3d at 180 (finding that the use "usurp[ed] a market that properly belongs to the copyright-holder") (citation omitted); Sega Enters., Ltd., v. Accolade, Inc., 977 F.2d 1510, 1523 (9th Cir. 1992) (explaining that if widespread conduct involving

congressional concern about the livelihoods of artists and individuals who rely on licensing revenue. Allowing this substantial amount of copying to be fair use would likely lead many future users to forgo obtaining a license. Further, the court in *Sony Music Entertainment v. Vital Pharmaceuticals, Inc.* held that when a user "completely ignore[d] the market for music licensing," the burden shifts to the user to demonstrate that their use is not likely to harm the market for the original.[304] Therefore, because User B did not obtain a license to use any part of "Someone Like You," they would be responsible for producing evidence that Sample Song B did not negatively affect the market for the original. Adele's unrealized royalties in this case would be limited to licensing revenues for "traditional, reasonable, or likely to be developed markets."[305] However, based on statutory requirements and industry practices, music licensing qualifies as a developed market. Therefore, this limitation is unlikely to have a significant impact in the music context.

Even if the use of MIDI files renders the use a mere imitation rather than a duplication infringing upon Adele's rights in the recording, the result may be the same for this fourth factor, as a finding of fair use would necessarily imply that the MIDI loophole provides an acceptable way to avert infringement. This is problematic for the sampling and licensing market because those who would normally obtain a license to sample "Someone Like You" and other songs may instead copy the songs via MIDI technology. While such an approach would be unwise, considering that it does not remove potential liability for infringement of the musical composition, it would nonetheless provide a way to avoid paying licensing fees, which some AI users would likely exploit. Therefore, the chilling effect is likely to occur regardless of whether the use is characterized as sampling or a literal duplication. Further, the piano phrase is an important part of "Someone Like You," both in the actual recording and in the composition, which is copied exactly. Therefore, Sample Song B may supplant the composition and thereby harm the sales and value of "Someone Like You."

While predictions about fair use are necessarily speculative given the unique factors here, the application of analogous precedent suggests that, at

the use at issue would diminish sales, interfere with marketability, or usurp the market, "all other considerations might be irrelevant"); A&M Recs., Inc., v. Napster, Inc., 239 F.3d 1004, 1017 (9th Cir. 2001) (finding that the use harms the market for the original by affecting the present *and* future market for digital downloads).

304. Sony Music Ent. v. Vital Pharms., Inc., No. 21-22825, 2022 U.S. Dist. LEXIS 183358, at *37–38 (S.D. Fla. 2022) (holding that a company's use of a record company's songs for commercial purposes was not a fair use).

305. *Fox News*, 883 F.3d at 180 (quoting Am. Geophysical Union v. Texaco Inc., 60 F.3d 913, 930 (2d Cir. 1994)).

a minimum, User B does not have a very compelling fair use defense. Future application of fair use in music by courts will be instructive, as will opinions addressing generative AI more specifically. A particularly important question to be answered will be how generative AI works that use predictive models will hold up against a transformation inquiry, as that factor typically seeps into the other three as well. Until courts provide such insight on how fair use and infringement apply to generative AI songs, Adele seems to have a decent case for infringement of the composition, so long as the subjective assessment leans in her favor. Infringement of the rights in the sound recording copyright, however, seems to present a less promising case under current interpretations of the Copyright Act.

IV. POLICY IMPLICATIONS

The analyses of Sample Songs A and B clearly suggest that current copyright law does not provide obvious answers to several questions that arise in the context of generative AI music and, more generally, AI technology. While certain provisions of the Copyright Act are intentionally broad to allow for changes, and amendments have addressed specific deficiencies identified by Congress, a fundamental deficiency arises from the fact that they did not design the Act with this advanced of technology in mind. For example, the limitation of rights in a sound recording to exact duplications was not promulgated with the expectation that machine learning algorithms would eventually train on data and duplicate it exactly through what technically qualifies as an independent fixation under the statute. Whether these deficiencies are addressed through amendments, judicial decisions, or administrative policies, a determination stands to be made as to whether specific new rules or exceptions are needed, or if the broad language of the Act should remain, with adjusted, AI-specific or AI-sensitive interpretations.[306]

Specific rules aside, the contentious situations created by generative AI music highlights the continuing struggle to balance protection for creators with the benefits of rapidly advancing technology. As the Court noted in *Twentieth Century Music Corporation v. Aiken*, the Copyright Act and its provisions are intended to reflect "a balance of competing claims upon the public interest."[307] On one side of the spectrum, it is important to recognize

306. While judicial interpretation has certainly shaped our understanding of copyright law, substantial changes necessary to address these issues are unlikely to come from the courts alone. *See* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429–31 (1984) ("Sound policy, as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyrighted materials."), *superseded by statute*, Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860, *as recognized in* Monge v. Maya Mags., Inc., 688 F.3d 1164 (9th Cir. 2012).

307. Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975).

the societal value of music and properly appreciate the talent it takes to release authentic, moving pieces of work.[308] If we want musically talented individuals to continue to pursue these creative aims and provide us with entertainment, their creative expression must continue to enjoy protection. This is a particularly salient concern given the sensitivity of the creation involved, as one artist is a vulnerable human, baring their soul, and the other "artist" is an inherently non-creative and non-vulnerable trained machine.

On the other end of the spectrum is the necessary recognition of the importance of encouraging technological advancement and pursuing a more efficient society. If the use of generative AI is aggressively cabined by the risk of copyright infringement litigation, the world may miss out on valuable works. While the protection of artists is undeniably important, it cannot be forgotten that protections are limited because the ultimate goal is to promote creativity for the public good.[309] Further, this could have a chilling effect beyond the music industry, impacting industries in which the use and advancement of this technology could change the world or save lives. Even within the music industry, if we limit the usage of AI by non-owners, how might that precedent impact the use of AI by owners themselves? Currently, similar technology is used in recording studios to make original songs and, particularly, to improve songs before they are released.[310] Artists would agree that this use is not the aim of cracking down on copyright infringement, but it would potentially be difficult to keep these uses separate and may result in frivolous and undesired suits between disgruntled artists and producers. Further, we need to determine the weight that the creative input of the user has on what uses are more permissible because not all AI systems dominate the creation without meaningful human input. Determining how and where to draw this line is far from simple and will necessarily depend on an increased understanding of the technology, assessment of policy priorities, and, to some degree, value judgments regarding what aims our society deems most important.

308. The Court in *Twentieth Century Music* described this end of the spectrum as reflecting the goal of "secur[ing] a fair return for an 'author's' creative labor." *Id*.

309. *See id.*; Authors Guild, Inc. v. HathiTrust, 755 F.3d 87, 94–95 (2d Cir. 2014) (explaining that copyright law does not confer natural rights of "absolute ownership" on authors, but is "designed rather to stimulate activity and progress in the arts for the intellectual enrichment of the public") (citing Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1107 (1990)).

310. The idea of protecting innovation speaks not only to new creations, but also to building upon existing processes to improve them, a continual process that is clearly important in the music industry where quality improvements are constant and arguably beneficial for everyone involved. *See* Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1163 (9th Cir. 2007) (highlighting the importance of encouraging "the development of new ideas that build on earlier ones").

CONCLUSION

Generative AI music presents a whole host of new questions, considerations, and potential implications for how copyright holders vindicate their ownership. While the application of current copyright law and precedents to these situations involving AI-generated music does not provide fully satisfying answers as to what will happen when songs like these land on court dockets, it does direct attention to the chief policy concerns and areas in which artists are vulnerable. With regard to "Fake Drake," the analysis of Sample Song A suggests that an infringement suit based on AI-generated soundalikes is unlikely to be successful. While a better understanding of the technology involved in AI-generated music may lead to stronger sampling claims, addressing "Fake Drake" is likely a matter better suited for trademark law and the right of publicity. Sample Song B presents slightly brighter prospects for artists to litigate AI-generated songs they believe infringe on their existing, copyrighted work. But these results are somewhat tentative, pending a better understanding of the technology and, ideally, insight from the Office.

What can be said for certain is that our understanding and expectation of how these cases will unfold are crucially informed by our understanding of the generative technology that ultimately creates the works. From the amount of user input to training data, there are many more considerations for actionable infringement than in a case of one person consciously copying the lyrics of a song by copying and pasting them onto new sheet music. As more is understood about how this technology actually uses existing songs to create new ones, the more we can apply the principles of copyright law and identify the gray areas that need clarification. To call these situations and concerns complicated would be a vast understatement. But if copyright law is to achieve its aims of "promot[ing] the Progress of Science and useful Arts,"[311] while also continuing to provide adequate protection for "original works of authorship,"[312] even in the face of alluring technological developments, work must be done to decipher between these considerations and identify those that are legally cognizable. While Drake likely cannot

311. U.S. CONST. art. I, § 8, cl. 8.
312. 17 U.S.C. § 102(a); *see also* H.R. REP. NO. 94-1476, at 51 (1976).

vindicate his copyright ownership rights by taking Fake Drake to court, future artists similarly affected might face a different trajectory thanks to "Heart on My Sleeve," and how it turned the country's attention to the question of how copyright law interacts with generative AI music.