CREATIVITY, IMPROVISATION, AND RISK:
COPYRIGHT AND MUSICAL INNOVATION

Olufunmilayo B. Arewa*

The goals and beneficiaries of copyright frameworks have long been contested in varied contexts. Copyright is often treated as a policy tool that gives creators incentives to create new works. Incentive theories of copyright often emphasize appropriability, which enables copyright owners to ensure that they profit from their copyrighted works by exercising control over uses of, and access to, such works. Although copyright clearly imposes costs in the form of restrictions on access to copyright-protected works and inefficiencies in the form of deadweight loss, the benefits of copyright are thought by many to outweigh the costs. Copyright discussions may at least implicitly assume that copyright frameworks, and the control rights that accompany such frameworks, increase creativity. However, little is actually known about the extent to which copyright increases creativity. Further, conceptualizations of creativity within legal discussions remain vague. Copyright discussions often pay significant attention to the risks to ownership for copyright owners posed by potential users and uses of copyright protected works. However, a focus on risks to ownership may obscure the presence of other types of risk in copyright contexts. Copyright control mechanisms may also pose significant risks to creativity and innovation because they may not sufficiently acknowledge the importance of uses of existing works as a creative force. Musical innovation, for example, has come in many instances from creators taking creative risks through uses of existing materials in ways that do not fit well within dominant copyright assumptions about creativity. Creators operating within such creative paradigms may expose themselves to greater legal risks as a result of their uses of copyright protected mate-

* Professor of Law and Anthropology, University of California, Irvine School of Law. A.B., Harvard College, M.A., Ph.D., University of California, Berkeley (Anthropology); A.M., University of Michigan (Applied Economics); J.D., Harvard Law School. Email: oarewa@law.uci.edu. For their helpful comments, I am indebted to participants in the Creativity and the Law Symposium at the University of Notre Dame Law School.
Copyright discourse would benefit from greater attention to potential dangers that copyright frameworks might pose for creativity and innovation. Further, greater consideration should be given to the extent to which risks taken by creators in the creative process, evident in practices such as improvisation, may foster creativity.

**INTRODUCTION**

Although copyright has expanded to artistic practices that necessarily involve more than the visual, a visual-textual bias in copyright has remained. The expansion of copyright to music underscores potential incompatibilities in applying visual copyright to an artistic practice, such as music, that is both oral and aural. In fact, music creation does not require writing, but may include oral and, at times, written traditions. Courts in music copyright cases give primacy to visual, written aspects of music and typically assume that oral musical expressions fall into the category of a performance, which is in turn assumed to derive from and be secondary to an underlying written musical composition. The visual bias in music copyright has become more problematic in the post-sound-recording era, when copyright increasingly protects things other than written musical expression. Further, the twentieth-century displacement in the popular music arena of European-based music by African-based music, which often embeds significant elements of oral music traditions, particularly challenges music copyright’s visual assumptions.

**I. COPYRIGHT, CREATIVITY, AND RISK**

**A. The Goals of Copyright**

The Intellectual Property Clause of the U.S. Constitution provides that: “The Congress shall have 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.” The authority for copyright thus embeds two key concepts that have long been a focus of intellectual property scholarship: progress/innovation and the rights of authors. Authors’ rights have been typically conceived of as a type of property right, hence “intellectual property,” but could, in reality, be structured in a number of different ways.

---

1 U.S. CONST. art. I, § 8, cl. 8.

2 See, e.g., Wheaton v. Peters, 33 U.S. (8 Pet.) 591, 657 (1834) (“That an author, at common law, has a property in his manuscript . . . cannot be doubted . . . ”).
From the perspective of artistic practice, the scope of effective control encompassed within ideas of authors’ rights has always been highly mutable, particularly in the music arena. Music compositional practices have varied both over time and among genres in ways that should be more explicitly recognized in copyright considerations of music. For example, early Renaissance music contained compositional and performance practices more akin to jazz, while nineteenth-century music came to embody what became dominant copyright assumptions about the priority of written compositions and fidelity to written musical texts in performance. Creation practices in the music arena reflect highly varied approaches to musical creation in which borrowing has been a norm in all genres and time periods. Although creators of music may borrow for different reasons, the pervasive nature of musical borrowing has significant implications for copyright treatment of musical creativity.

In addition to incorporating assumptions about the nature of artistic creativity, copyright frameworks also embed both explicit and implicit assumptions about the relationship between authors’ ownership rights and innovation. A pervasive assumption exists, for example, that copyright gives incentives to innovate that result in greater production of artistic works. Such greater production may be conceived of in both quantitative and qualitative terms. In contrast to

---

3 See Olufunmilayo B. Arewa, Writing Rights: Performance, Composition, and Copyright’s Visual Bias 24 (Jan. 18, 2011) (unpublished manuscript) (on file with author) (discussing changing conceptions of musical creation that became more pervasive in the nineteenth century with the sacralization of the classical music canon).

4 See Peter Van der Merwe, Roots of the Classical 75 (2004).

5 See supra note 3, at 21, 24.


8 See supra note 7, at 550–52.


the patent arena, however, the impact of copyright frameworks on the production of works is not well understood, although recent scholarship has increasingly addressed questions relating to copyright and the production of works. The impact of copyright on the production and consumption of works and creativity, more generally, is multifaceted.

Questions of quantity and quality are potentially complex and intertwined in varied copyright contexts. In addition to unanswered questions about the impact of copyright on the production of works, the extent to which copyright enhances artistic innovation and creativity remains under-explored. Further, how to appropriately determine what constitutes innovation remains uncertain in a broad range of artistic contexts. Creativity is one potential metric by which to measure artistic innovation. However, conceptions of creativity in the law remain nebulous and in many instances incompatible with actual creative practices in varied contexts. What constitutes creativity may also be quite subjective and depend to a significant degree on the eye of the beholder. Certain types of creativity are, however, disfavored by legal frameworks, which incorporate ideas about creativity heavily because . . . of impaired incentives to invest in maintaining and exploiting these works.

11 See, e.g., Raymond Shih Ray Ku et al., Does Copyright Law Promote Creativity? An Empirical Analysis of Copyright’s Bounty, 62 Vand. L. Rev. 1669, 1671–75 (2009) (testing the hypothesis that increased copyright protection increases the number of copyrighted works produced and finding that this hypothesis is often not true in many cases); Mark S. Nadel, How Current Copyright Law Discourages Creative Output: The Overlooked Impact of Marketing, 19 Berkeley Tech. L.J. 785, 789 (2004) (noting that copyright’s prohibition against unauthorized copying is not necessary to stimulate an optimal level of new creations and in fact appears to have a net negative effect on creative output).


influenced by autonomous romantic author conceptions that do not take sufficient account of the inherently collaborative nature of creation in a wide range of creative contexts.14

B. Musical Copyright and Visual-Textual Bias

Romantic author influenced conceptions of creativity in the music arena tend to lead to a focus on written aspects of musical expression. As a result of this focus on musical writings, copyright fails to include the full range of actual musical creativity. Copyright views of musical creativity contain a significant degree of visual-textual bias.15 This visual-textual bias constrains copyright in important ways that prevent copyright frameworks from encompassing musical creativity in its fullest. Visual bias emerges from three primary factors: historical, linguistic/semiotic, and cognitive.16 The historical factors that have shaped visual bias are, in part, a consequence of the technological realities of music preservation prior to the sound-recording era.

Although not immediately commercialized for music, sound recording technology became available following Thomas Edison’s 1877 development of tinfoil phonograph technology.17 Prior to the development of sound reproduction technology, music was generally preserved tangibly in writing and intangibly in human memory. Copyright, which originally protected literary and other writings, was thus initially based on protection of written musical compositions, which include musical notes and, in some cases, lyrics.18 Music is also a performance art, which has bearing on musical creativity, particularly once sound recording technologies permitted preservation of oral aspects of musical creativity evident in performance. Technological realities thus meant that musical copyright initially came to protect

---

14 See Sawyer, supra note 13, at 311 (“But most creative products are collaboratively created, and most of them are built out of existing ideas and components.”); Peter Jaszi, On the Author Effect: Contemporary Copyright and Collective Creativity, in The Construction of Authorship 29, 40 (Martha Woodmansee & Peter Jaszi eds., 1994) (“Copyright law, with its emphasis on rewarding and safeguarding ‘originality,’ has lost sight of the cultural value of what might be called ‘serial collaborations’—works resulting from successive elaborations of an idea or text by a series of creative workers, occurring perhaps over years or decades.”).

15 See Arewa, supra note 3, at 37–42.

16 See id. at 18 n.88, 20, 28–29 n.175.


musical writings. Actual musical creative practices, however, demonstrate the extent to which all music, including European classical music, contains both written and oral traditions.

How copyright came to protect music is an important factor in understanding persistent views of musical creativity. The early history of music copyright also reflects a trajectory in which initial concerns about unauthorized copying and distribution of completed works later came to shape conceptions on the creation side such that copying in creation became increasingly disfavored during the nineteenth century and subject to increasingly sacralized views of musical creativity.

The extension of copyright protection to music in eighteenth century Britain highlights continuing issues of concern in music copyright. The Statute of Anne, an early copyright statute that specifically refers to books and writings, was not at first thought to cover musical compositions. Although the Statute of Anne did not initially protect musical compositions, the unauthorized use of music was an issue of great concern to music publishers who traded accusations of piracy. Composers struggled with publishers in the eighteenth century both to prevent unauthorized publication of their works and to increase the low economic returns offered to them by publishing houses.

---

19 See id.; Charles Cronin, Virtual Music Scores, Copyright and the Promotion of a Marginalized Technology, 28 COLUM. J.L. & ARTS 1, 6 (2004) (“To remain rational, copyright law changes to accommodate new technologies involved in the creation, distribution and consumption of works of authorship that copyright protects.”).


21 See Arewa, supra note 3, at 22.

22 Statute of Anne, 1710, 8 Ann., c. 19 (Eng.).

23 Although the preamble of the Statute of Anne refers to books and writings, the remainder of the statute refers only to books.

24 See Martin Kretschmer & Friedemann Kawohl, The History and Philosophy of Copyright, in MUSIC AND COPYRIGHT 21, 27 (Simon Frith & Lee Marshall eds., 2d ed. 2004) (“Music was not thought to be protected under the Statute of Anne.”).


26 See id. (“Although unauthorized publication of a composer’s work was not illegal, hefty accusations of piracy flew between publishers.”); see also Kretschmer & Kawohl, supra note 24, at 27.

27 See Michael W. Carroll, The Struggle for Music Copyright, 57 FLA. L. REV. 907, 958–61 (2005) (discussing efforts to expand copyright); David Hunter, Music Copyright in Britain to 1800, 67 MUSIC & LETTERS 269, 272–77 (1986) (noting the difficulties of composers to earn a living); Kretschmer, supra note 25, at 207–08 (discussing relationships between music publishers and composers); Nancy A. Mace, Haydn and the
These early struggles between composers and their publishers foreshadowed conflicts that continue to the present.\(^28\)

Publishers and composers in the pre-copyright era used a number of methods to control uses of musical works. Rather than lobby for statutory protection, eighteenth-century music publishers used market control mechanisms to protect their rights, including control of distribution and predatory pricing against new entrants.\(^29\) Beethoven is said to have made his piano sonatas exceptionally difficult so as to control uses by others.\(^30\) Low payments to composers were also typical, and composers “often suffered the chagrin of seeing publishers grow rich.”\(^31\) Some resorted to other methods to control uses of music, including through exercise of control over distribution of music scores.\(^32\) As music director of the city of Hamburg from 1721 to 1767, composer Georg Philipp Telemann, who could not charge for church concerts, used guards to prevent those without printed copies of the Passion “performed” from entering the church.\(^33\)

The “most important sources of income for successful, independent composers” such as Händel and Mozart were “commissions, dedications[,] and performances of new compositions” rather than publishing revenues.\(^34\) Other composers resorted to self-publishing to increase income in light of the low returns offered by publishing houses.\(^35\) In the nineteenth century, “full scores and instrumental

---

\(^{28}\) See Olufunmilayo B. Arewa, *YouTube, UGC, and Digital Music: Competing Business and Cultural Models in the Internet Age*, 104 NW. U. L. REV. 431, 454–59 (2010) (discussing the relative distribution of economic returns in the contemporary music industry and noting that top grossing musicians earn more from concert and performance revenues than they do from copyright royalties); Carroll, *supra* note 27, at 958–61 (discussing legal reform initiated by modern musicians).

\(^{29}\) See Hunter, *supra* note 27, at 275–78.


\(^{32}\) Cronin, *supra* note 19, at 1 (“Wolfgang [Amadeus Mozart]’s redoubtable intellect undermined the Vatican’s exclusive control over the dissemination of Gregorio Allegri’s Miserere, the score of which was then closely guarded, and performances of which the pope allowed only within the Sistine Chapel.”).

\(^{33}\) See Kretschmer, *supra* note 25, at 208.

\(^{34}\) Id.

\(^{35}\) See id. at 207–08 (noting that successful popular song composer, Charles Dibdin, avoided London’s “publishing oligopoly” through self-publishing).
parts for operas and some large symphonic works," which would need to be acquired by anyone who planned to perform the opera or symphonic work, "were often printed but not published, so that the owner could more effectively demand royalties or specify conditions of performance."36

In 1777, the Bach v. Longman37 case clarified that the Statute of Anne did apply to musical works.38 Three possible legal grounds existed for a copyright action at the time of Bach: the copyright act (Statute of Anne), common law, and a royal privilege—none of which provided reliable grounds for music copyright.39 The Bach case arose when two leaders of the London music scene,40 Johann Christian Bach, youngest son of Johann Sebastian Bach, and composer and viola da gamba virtuoso Carl Friedrich Abel, sought to bring a test case against music publishers Charles Longman and James Lukey.41 The suit was brought in 1773 in Chancery Court by Bach, who had a longer term remaining on his royal privilege than did Abel.42 Based on his royal privilege,43 Bach sought injunctive relief for unauthorized editions of two Bach compositions—a lesson for the Harpsichord or Piano Forte and a sonata for the keyboard and viola da gamba—by Longman & Lukey, "a publisher with whom both [Bach and Abel] had been in dispute."44

Bach, who was a prominent composer, had been one of some sixteen composers to obtain a royal privilege,45 which, in Bach's case,
gave him the exclusive right to publish his works for fourteen years. After the 1774 House of Lords decision in *Donaldson v. Beckett*, which effectively “extinguish[ed] the common law copyright in published works,” Bach, following the path of London booksellers petitioning for relief from the loss of rights in books not protected by the Statute of Anne, unsuccessfully petitioned the House of Commons to overturn *Donaldson*. The 1775 Court of Common Pleas decision in *Stationers’ Co. v. Carnan*, which voided a royal privilege for almanacs, led Bach to amend his case to add the Statute of Anne as a new basis for granting injunctive relief.

The seminal *Bach* case thus came at a time of complexity and uncertainty with respect to copyright generally. Bach and Abel brought the suit with the intent to effect legal changes and provide composers with copyright protection equal to that of authors. Following the case, music publishers began registering musical works, which did not, however, lead to an improvement in composer earnings. Rather, the litigation that followed was largely among publishers themselves. J.C. Bach did not live to see significant fruits from the *Bach* case; he died a debtor in 1782, and his creditors unsuccessfully “attempted . . . to seize his body for sale to medical schools.”

Outcomes for popular composers, even in the eighteenth century,

---

46 See Small, supra note 27, at 526.
48 1 Kevin Garnett et al., Copinger and Skone James on Copyright § 2-17, at 35 (15th ed. 2005).
49 See Small, supra note 27, at 528 (noting that Bach followed the lead of the London booksellers and presented a petition for relief to the House of Commons following the *Donaldson v. Beckett* judgment).
51 See id. at 593 (voiding crown privilege granted for almanacs).
52 See Rabin & Zohn, supra note 27, at 115–16; see also Carroll, supra note 27, at 944 (discussing the influence of the *Donaldson* case on Bach’s lawsuit).
53 See Kretschmer, supra note 25, at 209 (noting that the *Donaldson v. Beckett* case inspired Bach and Abel to “launch a test case” against London publishers).
54 See Carroll, supra note 27, at 946 (noting that 175 music titles were registered with the Stationers’ Company between 1700 and 1779, growing to 738 from 1780 to 1789, and doubling again in the following decade).
55 See Hunter, supra note 27, at 281–82; Kretschmer, supra note 25, at 210.
56 See Kretschmer, supra note 25, at 210; Mace, supra note 27, at 539 (discussing a case involving trios by a student of Haydn published under Haydn’s name and how the case “underlines the confused status of musical copyright in the last quarter of the eighteenth century, when both composers and music sellers attempted to exploit the weaknesses of existing legislation for their own benefit”).
57 Scherer, supra note 30, at 175.
reflected a familiar pattern in which composers received limited sums from sheet music sales.\footnote{See Nicholas E. Tawa, Sweet Songs for Gentle Americans 116 (1980) (noting that “composer[s] of highly popular songs rarely profited to any extent from sheet-music sales” and that “[t]he most prominent musicians failed to garner more than a pittance for their hits”).}

The expansion of copyright to music evident in \textit{Bach} is often presented as a seemingly natural extension from literary writing to musical writing. However, the expansion of copyright from covering the word to covering the note has been far from smooth, in part due to important differences between the literary and musical arts. The expansion of copyright’s scope is often presented as a list that gives a date and type of material that became subject to copyright on the given date. However, simply listing a date that copyright became applicable to music just skims the surface of significant underlying issues and complexities. As was the case with the application of copyright to other artistic forms such as photography,\footnote{See Christine Haight Farley, The Lingering Effects of Copyright’s Response to the Invention of Photography, 65 U. Pitt. L. Rev. 385, 454 (2004) (discussing the expansion of copyright from books to new technologies, such as photography, that “have raised serious issues over copying and control, but more important, [that have] often challenged the boundary of the subject matter with never-anticipated commodities”).} music copyright both reflected and had an impact on sociocultural contexts of musical creation, dissemination, performance, and consumption. For example, with the application of copyright to music came greater awareness among composers that their work constituted intellectual property that had economic value.\footnote{See Hunter, supra note 27, at 272.} Further, recognition of the value of musical writing was an important factor in changes in power dynamics between composers and performers, particularly in the opera arena. As a result of such power shifts, by the end of the nineteenth century, composers in the European art music arena were able to wrest power from performers.\footnote{See, e.g., Hilary Poriss, Changing the Score 3–4 (2009) (describing changing practices in the nineteenth-century opera surrounding aria insertion and shifts in relative power between composers and performers).} Visual bias-influenced copyright frameworks gave composers significant power by ensuring that their status led to commensurate potential copyright financial rewards. Not surprisingly, composers such as Bach, Abel, Beethoven, and Hummel were strong advocates of copyright protection.\footnote{See Joel Sachs, Hummel and the Pirates: The Struggle for Musical Copyright, 59 Musical Q. 31, 31–32 (1973); supra notes 28–56 and accompanying text; see generally F.M. Scherer, The Emergence of Musical Copyright in Europe From 1709 to 1850 (HKS
In the European art music sphere, initial concerns about unauthorized distribution of musical works soon came to shape ideas about musical creativity more generally. More specifically, the advent of musical copyright came at a time of changing conceptions about musical creativity, particularly in the European art music genre. During the nineteenth century, European art music became increasingly characterized by sacralized notions of musical creativity that came to emphasize particular views of originality. This process of sacralization instilled norms in Western classical music that disfavored previously commonplace practices such as improvisation, which was largely eliminated from the Western classical tradition by the early twentieth century.\textsuperscript{63} Other commonplace creative practices such as abridgement and something somewhat akin to contemporary mashups, in which new pieces were created from elements of existing works, were also eliminated.\textsuperscript{64} Until the mid-nineteenth century, practices such as aria insertion, in which performers could override written scores and substitute or add arias of their choosing, were pervasive in opera.\textsuperscript{65} Taken together, a range of commonplace musical practices gave authority for other composers and performers to change and modify European art music for their own purposes. These practices diminished and were largely eliminated by the end of the nineteenth century as European art music began to embody conceptions of the musical work, the priority of written forms of music, and fidelity to the written work in performance as norms in musical creativity.\textsuperscript{66}

Sacralization had significant consequences for European art music as a living musical tradition. Sacralization contributed to European art music becoming a museum tradition that came to feature the work of dead and valorized great composers whose works should not be changed.\textsuperscript{67} In contrast, as was the case with Western art music when it was a living and vibrant musical tradition, living musical tradi-


\textsuperscript{64}See Charles Hamm, *Yesterdays: Popular Song in America* 71 (1979) (describing the opera *Cinderella*, a nineteenth-century English version of Gioachino Rossini’s opera *La Cenerentola*, created by Rophino Lacy, who retained most of Rossini’s music, but who also made “‘copious additions’ of music from other operas by the same composer”); Lawrence W. Levine, *Highbrow/Lowbrow* 139 (1988) (noting that the practice of abridgement was once commonplace in the nineteenth century).

\textsuperscript{65}See Poriss, *supra* note 61, at 5.

\textsuperscript{66}See Arewa, *supra* note 3, at 22, 24.

\textsuperscript{67}See Arewa, *supra* note 7, at 589, 611.
tions often involve interchange, reuse, borrowing, improvisation, and other uses of existing works that may be inconsistent with sacralized conceptions of creativity.

Changing nineteenth-century musical practices also have significant copyright implications. This is particularly the case because copyright has come to embrace sacralized conceptions of musical creativity that derive in part from dominant conceptions of creativity in the European art music arena in the latter half of the nineteenth century. The derivation and historical specificity of such assumed dominant music creative practices are insufficiently recognized in copyright. This is significant for a number of reasons. First and foremost, the vision of musical creativity embedded in copyright is a poor fit for actual musical practices, even in the European art music tradition, particularly prior to the late nineteenth century. As a result, even paradigmatic creators in that tradition would be copyright violators under contemporary copyright frameworks. The conception of the derivative work, for example, which was added to U.S. copyright frameworks in 1870 and expanded in the twentieth century, would have inhibited creativity by composers such as Bach and Mozart—both of whom were master improvisers, and both of whom borrowed extensively in their works. Further, actual creativity practices of such composers were far more akin to contemporary musical creativity practices than is often acknowledged.

C. Copyright and Creativity Risk

Copyright assumptions about musical creativity have import for how copyright addresses questions of risk. For example, improvisation, which is a core aspect of musical creativity, is also largely disfavored by copyright. Improvisation as musical practice often entails

---


69 See Arewa, supra note 7, at 604.

70 See Neal Zaslaw, Mozart as a Working Stiff, in On Mozart 102, 103 (James M. Morris ed., 1994) (citing the author’s conversation with another participant at a conference in Vienna on Mozart in which the author noted: “Mozart’s music ascended into the higher ether only in the course of the nineteenth century. During his lifetime, it was right down on the ground along with that of the other composers.”).

71 See infra notes 80–89 and accompanying text.
considerable levels of artistic risk-taking. Improvisational practices are also closely associated with innovation and creativity in varied contexts. The creative risks that may be inherent in improvisational practices clearly fall within the goals of copyright and should, in fact, be encouraged by copyright frameworks. Copyright largely fails to facilitate the creation of improvised works, in large part due to the ways in which copyright frameworks conceptualize and frame questions of risk in artistic contexts. Copyright discourse would benefit from greater attention to potential dangers that copyright frameworks might pose for creativity and innovation. Further, greater consideration should be given to the extent to which risks taken by creators in the creative process, evident in practices such as improvisation, may actually foster creativity.

Visual-textual bias in copyright leads copyright to concentrate to a significant degree on allocation property rights based largely on written musical texts. From a risk management perspective, copyright comes with a pervasive focus on threats to ownership and compensation for creators of written musical works. Consequently, copyright focuses to a significant extent on the implications of activities characterized as infringing the rights of authors and owners of musical and other works. This focus reflects the seeming ease of allocating and monitoring property interests in written texts, as well as a customarily traditionalist cast in the legal profession, which has a higher comfort level dealing with seemingly fixed written artistic texts. The seeming ease of this endeavor is, however, highly deceptive. For example, collaborativity in actual creative practices in music challenge our ability


73 See Frank J. Barrett, *Creativity and Improvisation in Jazz and Organizations: Implications for Organizational Learning*, 9 ORG. SCI. 605, 617 (1998); Charles J. Limb & Allen R. Braun, *Neural Substrates of Spontaneous Musical Performance: An fMRI Study of Jazz Improvisation*, 3 PLOS ONE 1, 3 (2008), available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2244806 (using brain imaging techniques to map brain functions of accomplished jazz pianists and finding “highly congruous pattern of activations and deactivations in prefrontal cortex, sensorimotor and limbic regions of the brain” and that “[t]his unique pattern may offer insights into cognitive dissociations that may be intrinsic to the creative process: the innovative, internally motivated production of novel material (at once rule based and highly structured) that can apparently occur outside of conscious awareness and beyond volitional control”).

to allocate rights and make determinations about how to treat similar works when infringement is alleged.\footnote{See Sawyer, supra note 13, at 311; Olufunmilayo B. Arewa, The Freedom to Copy: Copyright, Creation, and Context, 41 U.C. Davis L. Rev. 477, 482 (2007).}

Although ownership risk is highly relevant to copyright, other types of risk exist in contexts of musical and other creations that should be better identified and incorporated into copyright discourse. As a result, in addition to ownership risk, copyright policy discussions should also take account of creativity risk and legal risk. Assessments of creativity risk would need to evaluate the extent to which copyright frameworks may themselves pose risks to creativity. In the case of jazz and other musical forms in which improvisatory practices are pervasive, copyright frameworks may themselves pose a severe risk to creativity by virtue of how such frameworks treat forms of creative practice that fall outside sacralized conceptions of artistic creation. In addition to risks to creativity, copyright discourse should also consider the legal risks of copyright frameworks, particularly as those risks relate to varied types of creators, particularly those who are not lawyers and who may not have ready access to or funds to pay legal advisors. The creativity risks posed by existing frameworks are closely associated with potentially high levels of legal risks for artists working within disfavored creative paradigms. In some instances, this has led to significant mismatches between copyright assumptions and actual artistic practice.\footnote{See Arewa, supra note 7, at 555–57 (discussing inexact fit of copyright for music).}

II. Technology, Improvisation, and Musical Innovation

A. “Writing” Sounds: Nonvisual Musical Technologies and Copyright

Technological changes in the sound recording era have exacerbated the potential mismatch between copyright assumptions and creative practices. Prior to the advent of sound recordings, writing was a primary method by which copyrightable musical expression was preserved. With the advent of sound recordings, oral musical expressions could also be recorded and preserved. Copyright law has been modified to address nonvisual musical technologies such as sound recordings. For example, the Copyright Act of 1909\footnote{Pub. L. No. 60-349, 35 Stat. 1075, repealed by Copyright Act of 1976, Pub. L. No. 94-554, 90 Stat. 2541.} added a mechanical license provision intended to address concerns about copying of musical compositions by the emerging player piano and sound recording
industries.\textsuperscript{78} Limited copyright protection for sound recordings was added in 1972.\textsuperscript{79} But despite these modifications, recognition of the full implications of musical reproduction technologies based on sound rather than musical writings for underlying copyright assumptions remains elusive.

The continuing assumption of priority of written musical expression means that oral expressions of music, including in live performance and sound recordings, are assumed to derive from an underlying written musical expression.\textsuperscript{80} In contrast, in the popular music arena, the reverse is often the case. Music may thus be created in a studio, with the writing serving as a reduction of the original oral musical expression.\textsuperscript{81} These and other dominant nonvisual musical practices continue to challenge copyright frameworks that continue to reflect questionable assumptions about the relationship between written and oral musical expressions. Incomplete appreciation of the implications of oral musical expression for copyright is a major source of continuing tension in music copyright.

\textbf{B. Copyright, Improvisation, and Musical Innovation}

Copyright treatment of improvisation highlights the inexact fit of copyright for musical practices in living musical traditions. The conception of the derivative work, for example, which has broadened significantly since its introduction to U.S. copyright law in 1870, is fundamentally in tension with improvisatory and other common practices in living musical traditions. Derivative works, which potentially include any work based on an existing work,\textsuperscript{82} clearly encompass improvisatory works in ways that may make determinations of infringement difficult for practicing artists and potentially contested and

\textsuperscript{78} See Arewa, \textit{supra} note 28, at 465.
\textsuperscript{79} See Sound Recording Amendment Act of 1971, Pub. L. No. 92-140, 85 Stat. 391 (amending the Copyright Act to provide for the creation of a limited copyright in sound recordings for various purposes, including protecting against unauthorized duplication and piracy of sound recordings).
\textsuperscript{80} See Arewa, \textit{supra} note 3, at 34.
\textsuperscript{82} See 17 U.S.C. § 101 (2006) (defining a derivative work as “a work based upon one or more preexisting works”); Williams v. Broadus, No. 99 Civ. 10957 MBM, 2001 WL 984714, at *2 (S.D.N.Y. Aug. 27, 2001) (“[A] work is not derivative simply because it borrows from a pre-existing work. . . . When deciding whether a work is derivative by [§ 101], courts have considered whether the work ‘would be considered an infringing work’ if the pre-existing material were used without permission.” (quoting M.H. Segal Ltd. v. Hasbro, Inc., 924 F. Supp. 512, 519 (S.D.N.Y. 1996))).
unclear in practice. Further, conceptions of what constitute derivative works are deeply rooted in sacralized assumptions about creativity that fail to take sufficient account of creativity evident in musical collaborations and practices such as improvisation.

Improvisation, which comes out of oral musical traditions, often reflects spontaneous creative impulses. Improvisation is also considered "one of the few universals of music in which all cultures share in one way or another." Improvisation is a critical practice in the artistic arena because it can enable new artistic developments. Improvisation may play a role in niche creative communities in which new artistic movements develop. The extent to which such communities foster broader forms of creativity merits further examination. Late twentieth-century music movements, including hip hop and punk, for example, have in many instances been both highly improvisatory and largely nonvisual in musical practice. Although copyright cases have been better able to deal with the textual aspects of hip hop lyrics, the nonvisual aspects of hip hop musical practices, including sampling, are an uneasy fit for copyright. This reflects continuing difficulties in applying copyright in contexts of musical borrowing more generally.

Niche musical communities may be highly influential, which means that maintaining creativity in such communities may have important commercial and noncommercial spillover effects. Hip hop

83 See Bruno Nettl, Thoughts on Improvisation: A Comparative Approach, 60 Musical Quarterly 1, 3 (1974).
84 Id. at 4.
85 See Curtis L. Carter, Improvisation in Dance, 58 J. Aesthetics & Art Criticism 181, 181 (2000) ("[I]mprovisation is a means of suppressing historical consciousness that is necessary to break the causal chain between existing conventions and new developments in an artistic practice.").
86 See Ryan Snyder Ananat, Spectra of Singularity: Episodes of Improvisational Lyricism from Hiphop to Pragmatism 21 (2009) (unpublished Ph.D. Dissertation, American Culture, University of Michigan) ("[L]yrics and beats make a music of fusion that configures our experience through hiphop culture, organizing a common way of life and a shared world of sounds in which improvisation plays a leading role."); Timothy Dugdale, The French New Wave: New Again, in NEW PUNK CINEMA 56, 59 (Nicholas Rombes ed., 2005) (describing punk music as "collective improvisation fuelled by cheek and frustration" and noting that "this improvisation involved taking household objects, such as the safety-pin and rethinking their use in shocking and disruptive ways").
88 See Arewa, supra note 7, at 550 (arguing that copyright "does not adequately reflect the reality of musical borrowing").
is a clear example of a noncommercial niche street culture that came to have a significant global cultural impact.\textsuperscript{89} Similarly, punk music, which began as a non-commercial subculture,\textsuperscript{90} grew to have a global impact. Although commercialization of both subcultures was not uncontroversial,\textsuperscript{91} the presence of such artistic movements highlights the varied forms of musical creativity that may arise and flourish, at times in unpredictable and unanticipated ways.

\textbf{C. Copyright Context and Digital Era Collisions}

The varied contexts of collaboration and creative practices evident in music underscore the need for copyright to encompass varied types of creative practice to a far greater extent than has traditionally been the case. Copyright must thus take account of the needs of emerging artists as compared with established acts, as well as music based in improvisation, borrowing and other forms of musical collaboration. Copyright must also mediate among distinctions in a shifting terrain of musical practice and frequently rapidly evolving technological innovations.

The application of copyright to creative musical practices that involve improvisation and other forms of borrowing have become all the more important in the digital era. However, digital era contexts in which such practices may develop are changing in essential ways. Digital era shifts will likely increase collisions between formerly discrete spheres of activity. For example, improvisation and creative space previously existed alongside the commercial music sphere in an environment in which technological realities made noncommercial, niche creative movements difficult to commercialize without the involvement of commercial intermediaries. As a result, a broad range of cultural industry firms arose and garnered value in their role as intermediaries.\textsuperscript{92} In the digital era, however, the Internet has increasingly led to significant collisions between commercial and non-commercial milieus.\textsuperscript{93} Shifting contexts may also entail more aggressive


\textsuperscript{90} See Dick Hebdige, \textit{Subculture} 120–21 (1979) ("[T]he punks dislocated themselves from the parent culture and were positioned instead on the outside . . . .").

\textsuperscript{91} See Dugdale, \textit{supra} note 86, at 60.

\textsuperscript{92} See Arewa, \textit{supra} note 28, at 436.

\textsuperscript{93} See Matt Mason, \textit{The Pirate’s Dilemma} 6 (2008) (noting that in the digital era, "[i]llegal pirates, legitimate companies, and law-abiding citizens are now all in the same space, working out how to share and control information in new ways").
assertions of copyright and greater overt resistance to copyright in certain subcultures and artistic sectors.

**Conclusion**

Copyright frameworks that truly seek to enhance musical creativity must embed greater understanding of the varieties of musical creativities and practices. Such frameworks must also come to terms with and ameliorate the most visible consequences of pervasive copyright visual-textual bias. Addressing visual bias necessarily means modifying current dominant views of performance in music copyright. Although sound recordings may now be deposited and registered with the U.S. Copyright Office, copyright protection of such recordings remains limited. Visual bias leads copyright frameworks to assume that the creative locus of music is in the musical writing. Evidence from popular music forms today and European art music prior to the late nineteenth century suggests that this view of music and writing is fundamentally incomplete.

Encompassing a fuller view of musical creativity in copyright could start with recognition of the full range of musical activities embedded in performance. Further, taking account of musical creativity will require better acknowledgment of the importance of improvisation in musical creativity. Recognition of varied aesthetics of creation and creativity are an important starting point from which copyright could better deal with a fuller range of musical creativity.

Basing copyright on more authentic assumptions about musical creativity can also play an important role in addressing both creativity risk and legal risk. Copyright frameworks that reflect a broader range of musical practice will facilitate creations by innovative musicians who might otherwise be dissuaded from borrowing to create music because of copyright conceptions that do not encompass their particular forms of creativity. Given that the topography of creativity may be uncertain and unpredictable, copyright frameworks could do better to enhance broader forms of creativity in music.

---

95 See Arewa, supra note 3, at 40 n.253.
96 See id. at 4.
97 See id. at 1.