An Economic Model of Sampling, Cover Versions, and Musical Collage

Peter DiCola*
University of Michigan and Future of Music Coalition

Abstract

Copyright law has recently altered its restrictions on musicians who wish to engage in sampling, the use of other creators' sound recordings to construct new musical works. These restrictions include recent judicial decisions like *Bridgeport Music v. Dimension Films* (6th Circuit, 2005), which found copyright infringement in the unauthorized use of a two-second sample used in the background of a song. More generally, expansions in copyright law, such as the 1976 Copyright Act's expansion of the exclusive right "to prepare derivative works," have made direct creative borrowing more expensive and occasionally impossible. In this paper I explore several legal and economic issues implicated by this policy problem, including copyright law's discrimination between certain categories of creation, labor-economic choices presented to musicians who consider sampling, and various approaches to reform. Systematic data on sampling activity and sample-licensing fees are not currently available, making statistical analysis infeasible. Given that limitation, this paper outlines an economic model to highlight the fact that the creations of others are a key input into new creations. The model thus illustrates certain key tradeoffs, arguing that changes in copyright can affect musicians' allocations of labor between recording, touring, and any outside options. Furthermore, legal changes will affect musicians' decisions about whether to create recordings and whether to release those recordings commercially. I illustrate this tradeoffs using a simulation. I then use the model to frame a brief survey of proposals for reform to the sample-clearance system. Finally, I discuss approaches to future data-collection that would facilitate testing of the theoretical model.

* I would like to thank Rebecca Eisenberg, Omri Ben-Shahar, John DiNardo, Rosemarie Ziedonis, Andreas Pape, Sarah Gubbins, Peter Siegelman, Jenny Toomey, Hank Shocklee, Kembrew McLeod, Siva Vaidhyanathan, Mark Katz, and Katherine Brucher for helpful conversations and useful suggestions. All errors and oversights are mine.

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Introduction

Every musical work draws on prior musical works. Ideas first used in some prior work, perhaps long ago—for example, the diatonic scale, a seventh chord, or sonata form—have been the building blocks of countless pieces of music. Particular expressions of musical ideas, such as melodies, lyrics, or drum breaks, can also become part of later, different works. Musicians are influenced by the styles of other, prior musicians, whether they choose to pay homage to those styles, to modify them, or to reject them. Performance and recording techniques also pass from prior musicians to later ones. For these reasons, every musical work is a sort of collage, assembling, combining, mixing, and generally using music ideas and expression that other musicians discovered or created first. The overarching questions for copyright law are whether, when, how, and to what extent musicians should receive compensation for the subsequent use, by other musicians, of the ideas or expression they generate.

The dividing line between idea and expression has been an important boundary in copyright law between unprotected ideas and protected expression. To provide the examples in the opening paragraph, I had to think twice about how abstract a concept had to be for me to convincingly refer to it as an idea rather than expression. I wrote "a C7 chord" initially, but changed it to "a seventh chord," since someone could argue that a C7 chord (rooted at C and containing a flat seventh) is a particular instantiation of a more general concept of chords rooted on any scale tone and containing sevenths, whether flat or major. On the other hand, because multiple inversions, placements, and embellishments of a C7 chord are possible, the mere specification of "C7" in a jazz or rock tune remains quite abstract. As it happens, copyright treats a single C7 chord as an idea; put that C7 chord in a sequence with another chord and another, and at various points as you build the sequence you'll reach what different courts would deem protected expression.[1]

Copyright law contains other dividing lines, of course, like any other body of law. One can only copyright things that fall into eight categories of subject matter: architectural works are in, blank forms are out. Copyright draws a not-too-demanding line between original and non-original works. Among other elements of determining infringement, courts have distinguished quantitatively sufficient copying and "de minimis" copying. Moreover, copyright treats different types of subject matter differently. For the analysis in this paper, the distinction between musical composition copyrights and sound recording copyrights will be most important. What copyright protects can change depending on the subject matter, and so can the type of protection (and thus

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[1] "Common musical elements like chords and scales lie in the public domain and may be properly classified as 'ideas.' " Mark Avsec, *"Nonconventional" Musical Analysis and "Disguised" Infringement: Clever Musical Tricks to Divide the Wealth of Tin Pan Alley,"* 52 CLEV. ST. L. REV. 339, 352 (2004). *See also* Jarvis v. A&M Records, 827 F. Supp. 282, 291 (D.N.J. 1993) ("Easily arrived at phrases and chord progressions are usually non copyrightable.") (citing WILLIAM F. PATRY, LATMAN'S THE COPYRIGHT LAW 65 (6th ed. 1987)); *cf.* Newton v. Diamond, 204 F. Supp. 2d 1244, 1253 ("In assessing originality, courts must be 'mindful of the limited number of notes and chords available to composers and the resulting fact that common themes frequently appear in various compositions, especially in popular music.' ") (quoting Gaste v. Kaiserman, 863 F.2d 1061, 1068 (2d Cir. 1988)).

the amount of compensation). For instance, property rules apply to most categories, but liability rules apply to a few others.

Broadly speaking, my goal in this paper is to analyze how copyright law's many categorizations affect, even shape, creativity. I seek to develop an economic framework to study the effects of changes in decisions about what musical works receive protections and about what kind of protection those musical works receive. Despite the pervasiveness of other works as an input to the creative process, and despite the blurriness of copyright's many line-drawing exercises, stark differences in legal treatment can result from copyright's modes of categorization.

More specifically, I have focused on the economic impact of copyright law's treatment of music sampling, cover versions, and musical collage. "Sampling" in this context refers to the practice of using other creators' sound recordings to construct new musical works. The practice, while common in genres like hip-hop and electronica, occurs in many other genres as well. Digital sampling technology, which allows musicians to easily reproduce and manipulate sounds, including sounds recorded by other musicians, arose in the mid-1980s. Soon after, copyright law had to respond, mainly in the form of courts deciding infringement lawsuits, starting with the landmark (of a sort) *Grand Upright Music v. Warner Brothers Records*[2] in 1991. As it became clear that samples were in a protected category of copyright law, the music industry gradually developed a set of practices to handle what's known as "sample clearance"—obtaining licenses to use samples in subsequent musical works. But case law continues to shape practices, and more immediately fears, in the music industry. *Bridgeport Music v. Dimension Films*,[3] for which the Sixth Circuit's final opinion came down in 2005, surprised many in the industry by holding that no "de minimis category"—i.e., a category of works or parts of works deemed too small to receive copyright protection—exists for sound recordings. As Justin Hughes has recently pointed out, copyright law does not define the central term "work," which leaves open the possibility that sub-units of a work, such as short samples of a sound recording, can be treated as works themselves.[4]

The surprising *Bridgeport* ruling shows that copyright law reflects specific choices about who receives a property right in what, and that such choices can have a distinctly categorical, on/off nature. Because copyright's default mode of protection is a property rule, eliminating a de minimis category for sound recordings changed the legal environment—in the Sixth Circuit, anyway—from uncertainty, with a possibility of zero protection for a class of short parts of sound recordings, to a fair measure certainty, with maximal protection for any length of sound recording. Under the copyright code the court did not have much flexibility to craft an intermediate solution. But one can ask whether a different congressional policy would handle sampling better. Constitutionally, copyright law must strike a bargain between creators and the public, offering property rights in creative works for a limited time in return for more works and broader access to those works. How does choosing or shifting what categories of works receive

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[2] 780 F. Supp. 182 (S.D.N.Y. 1991).

[3] 410 F.3d 792 (6th Cir. 2005).

[4] Justin Hughes, Market Regulation and Innovation: Size Matters (Or Should) in Copyright Law, 75 FORDHAM L. REV. 575 (2005).

what kind of property rights affect both sides of this bargain? What are the consequences of stark categorization for creativity, for musicians, for the music industry, and for consumers?

In this paper I propose an economic framework for thinking about how copyright law treats different categories of musical creation. The law will discriminate based on whether a work uses protected aspects of musical composition, whether a work uses protected aspects of a sound recording, both, or neither. Within those four categories, other copyright doctrines will further categorize musical works. Many sampled works fall into the "both" category, but some don't: for example, utilizing just a small portion of a musical composition can sometimes benefit from a de minimis exception to infringement of the composition. Consider another sub-classification, this time within the set of works using only a prior musical composition. Cover versions are re-recordings of previously recorded and distributed musical compositions that retain "the basic melody" and "fundamental character of the work."[5] They are subject to a compulsory license. I discuss other sub-categories below. In this paper I present a model of the economic consequences of these differences in treatment and to compare the results among categories.

My goals in presenting an economic model are to highlight certain important characteristics of the legal and economic environment, to capture a few key tradeoffs, and to generate some testable hypotheses about the effects of changes to the law of music copyrights. The central legal aspect of the music industry I hope to illustrate is the differential treatment among categories of music works based on how they are produced. The key economic aspects I focus on are, first, the ways that musical creation is a kind of production process with inputs that have particular prices, and second, the fact that musicians can allocate their time between different kinds of creative activities or to options outside the music industry. I present a model of musical production and of a musician's allocation of labor time. The model posits that musicians face tradeoffs between inputs to production, between creative activities, and between strategies toward licensing. As a result, changes to copyright law that make a new category of works copyright-protected, depending on the details of economic conditions, result in benefits or harms for musicians and consumers in three ways: (1) more or fewer musical works being produced, especially in particular genres; (2) musicians shifting labor time from recording to performance or vice versa; and (3) more or fewer musicians choosing to license the prior works they use.

A model in the abstract can help to organize thinking or to illustrate tradeoffs, and even frame an evaluation of policy proposals. Several proposals for reforming copyright law's treatment of prior musical works exist, as do several proposals for private-law solutions, and I begin a discussion of both in the context of the economic model described in broad strokes above (and in detail below). Ideally, however, the model can shape an empirical strategy. In this paper, I also mention my future plans for data collection, in anticipation of work that will test predictions from the model, measure conditions that appear important based on the model, or both.

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[5] 17 U.S.C. § 115(a)(2).

In short, this paper argues that copyright law promotes, discourages supports, shapes, and distorts creativity, and provides a model of how that might occur in the music industry, with a focus on the use of prior works in musical creation. The paper aims to set the table for an empirical investigation of whether copyright's effect on the music industry, especially with regard to sampling, has been beneficial or harmful. Part I explains the relevant terrain of music copyright. Part II briefly describes the history and practice of sampling, and reviews the case law with an eye toward its economic content. Part III presents the economic model in two parts: first the model of production and second the model of musicians' labor time allocation. Part IV considers various policy proposals, how to compare them, and how to begin to evaluate them in the context of the economic model. Part V explores the models' implications for data collection and statistical analysis; a conclusion follows.