

**CREATIVE
LICENSE**

The
Law and Culture
of Digital Sampling

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with Jenny Toomey and Kristin Thomson

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why the interviewees' words provide the backbone of this study. Like a musical collage, this volume mixes together this source material with our own legal, economic, historical, and cultural analysis to create a richer text—a collage of words that both describes and enacts the technique of sampling.

1

THE GOLDEN AGE OF SAMPLING

In this chapter we compare and contrast two key moments in hip-hop music's evolution in order to illustrate how the emergence of the contemporary sample licensing system impacted creativity. First, we examine the golden age of hip-hop, when sampling artists were breaking new aesthetic ground on a weekly basis. Following that, we explain how legal and bureaucratic regimes forcefully constrained the creative choices that hip-hop producers could make. The rise and fall of sampling's golden age—roughly between 1987 and 1992—offers evidence that illustrates why we should care about sampling as a fruitful musical technique. As we mentioned in the introduction, recent history can provide us with a lesson about what happens when we don't make carefully considered policy decisions about copyright and creativity.

Paul Miller, a.k.a. DJ Spooky, notes that some of the key albums and artists from the golden age include De La Soul's *3 Feet High and Rising*, Pete Rock & C. L. Smooth's *Mecca and the Soul Brother*, and Public Enemy's *It Takes a Nation of Millions to Hold Us Back*, among others. We can add to that list many other classic albums from the Jungle Brothers, Queen Latifah, MC Lyte, Boogie Down Productions (BDP), and Eric B & Rakim, to name but a few. "These albums had a rich tapestry of sound, a variety of messages," notes the media studies scholar Siva Vaidhyanathan. "They were simultaneously playful and serious, and they really stand as the *Sgt. Pepper's* or *Pet Sounds* of hip-hop." And as the MC and producer Mr. Lif observes, "The difference between hip-hop production in current times and in the 1980s during

the golden era—it just allowed so much more freedom. Like, you didn't think about, 'You couldn't sample this, or you couldn't sample that.'"

So, for instance, when BDP released their debut *Criminal Minded* in 1987, they didn't ask AC/DC whether they could sample "Back in Black" on their classic song "Dope Beat." Instead, BDP just did it, despite the fact that the hard rock group has since become known for turning down sample requests (or, for that matter, refusing to allow its music to be sold online). "To this day I don't know why AC/DC didn't sue us for that song," frontman KRS-ONE told the journalist Brian Coleman. "That's all samples. I'm probably incriminating myself, but nothing on *Criminal Minded* is cleared."¹ A few years later, artists like KRS-ONE would no longer be able to fly under the radar like they used to. The golden age was an important moment during the development of hip-hop as a musical art form, and it opened up a range of artistic possibilities that largely weren't censored by legal and economic interests.

SAMPLING'S GOLDEN AGE

Sampling was a very intricate thing for us. We didn't just pick up a record and sample that record because it was funky. It was a collage.

We were creating a collage.—HANK SHOCKLEE

The standout records of the golden age were created at a time when hip-hop was still considered a flash in the pan by the larger music industry. This attitude gave many hip-hop artists the opportunity to make music exactly as they imagined it, without restrictions. This was particularly true of De La Soul, a group that hailed from the African American suburbs of Long Island, a region that also produced Public Enemy. De La Soul consisted of Pasemaster Mase, Trugoy, and Posdnuos—a threesome that was augmented on their first three classic albums by the producer Prince Paul. His former group Stetsasonic was signed to Tommy Boy Records, an important independent hip-hop label that released records by Naughty By Nature, Queen Latifah, and many other popular hip-hop acts. But it was De La Soul that was the jewel in the label's crown in the late 1980s, particularly because they were able to match their experimental approach with platinum sales.

"They had an aesthetic of taking everything and the kitchen sink and throwing it into the blender," states the hip-hop historian and journal-

ist Jeff Chang. "So, you didn't just have George Clinton, the Meters, and the usual funk stuff you would expect on a record. You'd have French language records. You'd have the Turtles. You'd have Led Zeppelin. You'd have Hall and Oates. You'd have all kinds of crazy things coming out of the mix, and it sounded the way like a lot of people heard pop culture at that moment in time." The title of their first album came from a sample they snatched from Johnny Cash's hit from the 1950s "Five Feet High and Rising," during which Cash sings, "Three feet high and rising, ma." ("Dave's father had that record," says Posdnuos, referring to the group member known back then as Trugoy.)²

"I definitely, *definitely* was taken aback by what De La Soul did," says the hip-hop journalist Raquel Cepeda. "They just went ahead and took whatever moved them." Prince Paul echoes Cepeda when he says, "We went in there to have fun and experiment, and with De La, we could literally do *anything*."³ The creative field was wide open, with no significant legal or administrative fences yet erected. One can also place the Beastie Boys' densely packed sophomore record, released in 1989, into the same experimental category. "Look at the *Paul's Boutique* record," says the current Beastie Boys DJ, Mix Master Mike. "That was sample mastery right there. Those records were just *full* of samples." Although there is no accessible paper trail that confirms what was sampled, or how many samples *Paul's Boutique* contains, somewhere between one hundred and three hundred is a safe guess.⁴

The Dust Brothers' John Simpson, who co-produced *Paul's Boutique*, details the creative processes and the technologies—rudimentary by today's standards—involved in making that record. "The people who worked at the studios thought we were crazy at the time, 'cause they had never seen anybody make songs that way."⁵ Simpson explains that they would build a song starting from one sampled loop of instrumentation that was then layered with other loops and bursts of sound. The Beastie Boys and the Dust Brothers would then painstakingly sync each of the other loops up with the first one, spending hours getting the layers to sound good together. It was a laborious process, Simpson says, explaining that "if you knew which tracks you wanted playing at any given time, you typed the track numbers into this little Commodore computer hooked up to the mixing board. And each time you wanted a new track to come in, you'd have to type it in manually. It was just painful. It took *so* long. And there was so much trial and error."⁶

Not only was it time consuming to put the parts together, the search for musical materials was also laborious. As Miho Hatori—one half of the now-defunct duo Cibo Matto, who used numerous samples in their work—tells us, “We were always buying records, *searching, searching*, and then sometimes we find, ‘Oh, a Silver Apples record!’ And then we find this one very short part, ‘There, *that* bass line!’” This process of searching for sounds is called “crate digging,” and it is central to sample-based music. “To find the right one or two seconds of sound,” Hatori says, “that’s a lot of work.” Trugoy of De La Soul explains the haphazard ways he looks for potential samples as follows: “I could be walking in the mall and I might hear something, or in a store, something being played in the store, and say, ‘Wow that sounds good.’ Or a sound in an elevator, you know, elevator music, ‘That sounds good.’ If it sounds good and feels good, then that’s it. It doesn’t matter if it was something recent or outdated, dusty, obscure, and, you know, weird.”

Although those records by De La Soul, the Beastie Boys, and others are justly revered for their sampling techniques, no one took advantage of these technologies more effectively than Public Enemy. When the group released *It Takes a Nation of Millions to Hold Us Back* in 1988, it was as if the work had landed from another planet. The album came frontloaded with sirens, squeals, and squawks that augmented the chaotic backing tracks over which frontman Chuck D laid his politically and poetically radical rhymes. Their next record, *Fear of a Black Planet*, released in 1990, is considered culturally so important that the *New York Times* included it on its list of the twenty-five most significant albums of the last century. Additionally, the Library of Congress included *Fear of a Black Planet* in its 2004 National Recording Registry, along with the news broadcasts of Edward R. Murrow, the music of John Coltrane, and other major works.

In the final pages of this section, we examine Public Enemy’s creative processes during this period in order to glimpse what was possible creatively and to understand what was lost when the golden age came to a close. Public Enemy was, and still is, deeply influential for a wide variety of artists who followed them. Public Enemy’s production team, the Bomb Squad—Hank Shocklee, Keith Shocklee, Eric “Vietnam” Sadler, and Chuck D—took sampling to the level of high art while keeping intact hip-hop’s populist heart. They would graft together dozens of fragmentary samples to create a single song collage. “They really put

sound and noises together and made incredible music,” De La Soul’s Posdnuos says. As a contemporary of Public Enemy who hailed from the same area and drew from a similarly wide sonic palate, he tells us, “Public Enemy reminded me a lot of what we were doing, obviously in a different way. But you can listen to their music and hear something else for the first time.”

The group’s music was both agitprop and pop, mixing politics with the live-wire thrill of the popular music experience. Matt Black of the British electronic duo Coldcut, which emerged around the same time as Public Enemy, remembers the impact of their song “Rebel Without a Pause.” It was one of the many tracks on *It Takes a Nation* that featured repetitious, abrasive bursts of noise, something that simply wasn’t done in popular music at the time. As Black tells us, “That noise—what some people call the ‘kettle noise’—it’s actually a sample of the JB’s ‘The Grunt.’” Public Enemy took that brief saxophone squeal (from a James Brown spin-off group) and transformed it into something utterly different, devoid of its original musical context.

“It was just so avant-garde and exciting, and heavy,” Black says. Chuck D tells us that part of the intention behind transforming the sounds was to disguise them, but that wasn’t the primary purpose; mostly they wanted to make something fresh. “We wanted to create a new sound out of the assemblage of sounds that made us have our own identity.” Chuck D says, “Especially in our first five years, we knew that we were making records that will stand the test of time. When we made *It Takes a Nation of Millions to Hold Us Back* we were shooting to make *What’s Going On* by Marvin Gaye and when we made *Fear of a Black Planet* I was shooting for *Sgt. Pepper’s*.”

Behind the boards was Hank Shocklee (widely credited as the architect of Public Enemy’s aesthetic), who served as the director of Public Enemy’s production unit, the Bomb Squad. “Hank is the Phil Spector of hip-hop,” says Chuck D, referring to the producer from the 1960s who perfected a sonic approach known as “the wall of sound.”⁷ In Public Enemy’s hands, sampling was now a tremendously complex choreography of sound that reconfigured smaller musical fragments in ways that sounded completely new. “My vision of this group,” says Hank Shocklee, “was to have a production assembly line where each person had their own particular specialty.” Jeff Chang explains that the members of the Bomb Squad had worked out an elaborate method that involved

the group members bringing into the studio different types of sounds. “They’re figuring out how to *jam with the samples*,” says Chang, “and to create these layers of sound. I don’t think it’s been matched since then.” The Bomb Squad’s success hinged on the fact that each member brought a different approach to making music, crafting sounds, and working with technology. “I’m coming from a DJ’s perspective,” says Hank Shocklee. “Eric [Sadler] is coming from a musician’s perspective. So together, you know, we started working out different ideas.”

Public Enemy’s distinctive sound grew out of the push and pull between Eric Sadler, who often advocated for a more traditional, structured approach to songwriting, and Hank Shocklee—who “wanted to destroy music,” as Chuck D put it. “When you’re talking about the kind of sampling that Public Enemy did,” Hank Shocklee says, “we had to comb through thousands of records to come up with maybe five good pieces. And as we started putting together those pieces, the sound got a lot more dense.” In some cases, the drum track alone was built from a dozen individually sampled and sliced beats. The members of Public Enemy treated audio—from singles, LPs, talk radio, and other sources—as a kind of found footage that could be spliced together to create their aural assemblages.

“We thought sampling was just a way of arranging sounds,” says Chuck D. He explains that Public Enemy wanted “to blend sound. Just as visual artists take yellow and blue and come up with green, we wanted to be able to do that with sound.” Hank Shocklee adds, “We would use every technique, no different than in film—with different lighting effects, or film speeds, or whatever. Well, we did the same thing with audio.” Even though the group was working with equipment that was rudimentary by today’s standards, they made the most of the existing technologies, often inventing techniques and workarounds that electronics manufacturers never imagined.

“Don’t Believe the Hype” on *It Takes a Nation* is another notable example of the Bomb Squad’s aural experiments. It was, according to Hank Shocklee, “one of the strangest ways we made a record. We were looking for blends in particular records; so I might be on one turntable, Keith on another, and Chuck on another turntable at the same time.” As Chuck D elaborates further: “We would go through a session of just playing records, and beats, and getting snatches, and what Hank would

do is record that whole session. You know, 95 percent of the time it sounded like *mess*. But there was 5 percent of magic that would happen. That’s how records like ‘Don’t Believe the Hype’ were made. You would listen to sixty minutes of this mess on a tape, and then out of that you would be like, ‘Whoa! What happened right here?’”

They used the same approach when constructing Public Enemy’s next album, *Fear of a Black Planet*. “It’s completely an album of found sounds,” Chuck D says. “It was probably the most elaborate smorgasbord of sound that we did.” He describes how he spent at least one hundred hours listening to various tapes, records, and other sound sources in search of samples for the album. As the group’s lyricist, Chuck D needed to fit the snatches of sampled songs, radio snippets, and everything else into his lyrics so that his rhymes and those sounds would weave together to create a theme for the album. “There were hundreds of sampled voices on that album,” Chuck D explains. Pointing to the album’s opening track, “Contract on a World Love Jam,” he says the song holds “about forty-five to fifty voices” that interlock and underscore the album’s message with a forceful sonic collage.⁸

Regarding Public Enemy’s musical complexity, the DJ and producer Mr. Len points to a particular track, “Night of the Living Base Heads,” from *It Takes a Nation*. As Mr. Len says, “If you really listen to that song, it changes so many times.” Kyambo “Hip Hop” Joshua—who started out in the music industry working for Jay-Z’s Roc-a-Fella Records in the mid-1990s, and who now co-manages Kanye West’s career—echoes Mr. Len. “It was common to have multiple samples in a song, like on Public Enemy or N.W.A. albums,” Hip Hop says. “If you was to go into those records, you could look at one record and you’ll see five or six samples for every song. There was more changeups and drums was changing on different parts, and samples was changing.”

“I’m a big Public Enemy fan,” Girl Talk tells us. “Even on the subconscious level I think it really affected me—just understanding sampling as an instrument and understanding the way people make their music like that.” And MC Eyedea adds, “One of the reasons why we don’t like most modern hip-hop is because we can listen to [Public Enemy records], and their arrangements are so much more complex than *anything* today.” During hip-hop’s golden age, artists had a small window of opportunity to run wild with the newly emerging sampling technolo-

gies before the record labels and lawyers started paying attention. “It was definitely a time when sampling artists could get away with murder and we just—we *did*,” says Coldcut’s Matt Black.

On Public Enemy’s *It Takes a Nation of Millions to Hold Us Back*, Chuck D raps about white supremacy, capitalism, the music industry, and—in the case of “Caught, Can I Get a Witness?”—digital sampling: “Caught, now in court ‘cause I stole a beat / This is a sampling sport / Mail from the courts and jail claims I stole the beats that I rail . . . I found this mineral I call a beat / I paid zero.” Our interviewees told us that no one bothered to clear the many fragmentary samples contained in Public Enemy’s classic song “Fight the Power,” which was featured in Spike Lee’s *Do the Right Thing* (even though that film was released by a large movie studio and the soundtrack album was on a major label). As Chuck D explains, “It wasn’t necessary to clear those albums, *Fear of a Black Planet* and *It Takes a Nation*, because copyright law didn’t affect us yet. They hadn’t even realized what samplers did.” The music producer El-P waxes nostalgic: “It was just this magical window of time.”

THE END OF THE GOLDEN AGE

Once the money came in and said, “Yo, you can’t keep doing this,” all the momentum just kind of dropped out. It was like the bottom fell out the bucket. And those cats were saying, “Man, that’s our style. Now you’re telling me that our style’s too expensive?”—MR. LEN

Of course, not everyone stitched together their samples like Public Enemy did. There were plenty of songs from the golden age that merely looped the hook of an earlier song, and it was this type of sampling that began provoking legal action. For example, the influential old-school rapper T La Rock (and one-time EPMD label mate) points to the “I Shot the Sheriff” sample—which provides the backbone of EPMD’s “Strictly Business.” Referring to the sampled performance by Eric Clapton, T La Rock says, “I don’t care who you are, you *know* where that loop is from. And there’s a few songs like that in their records.” Those reservations aside, he is still a fan of EPMD, and he acknowledges that even a simple loop can work its magic if used the right way. Nevertheless, this kind of sampling made T La Rock uncomfortable back then, when few hip-hop artists had concerns about copyright.

“There were some producers who really had no originality,” T La Rock says. “It’s as if they took the whole song. They sampled so much out of that record that there was no real production there. That’s the problem I had with a lot of the producers that sampled. They didn’t try to contact the person and say, ‘Hey, you know, I want to make some type of publishing deal or something like that.’ And for years and years and years, this went on and on under the radar, you know?” In EPMD’s case it wasn’t far enough below the radar, because many of the original artists tracked them down and demanded payment. “We never cleared any samples on the first album,” EPMD’s Erick Sermon chuckles. “People would just come after us after they knew we had sampled them. Eric Clapton wanted ten thousand dollars, Roger Troutman wanted five thousand. They didn’t even sue us back then—we just paid them and that was that.”

With the commercial success of a number of hip-hop albums in the late 1980s, the music industry had begun to see the genre as not just an inner-city fad but as a solid source of sales revenue. With commercial validity also came increased scrutiny over samples. During the early 1990s—after a wave of lawsuits we will address in chapter 4—the legal landscape radically changed. This shifted the ground beneath the feet of hip-hop artists. “By 1994, when we made *Muse Sick-N-Hour Mess Age*,” says Chuck D, “it had become so difficult to the point where it was impossible to do any of the type of records we did in the late 1980s, because every second of sound had to be cleared.” Another thing that occurred by the early 1990s was that the cost of clearing samples—and the legal risks of *not* clearing samples—had significantly increased. As Harry Allen, a hip-hop journalist who has long been affiliated with Public Enemy, observes, “Records like *It Takes a Nation of Millions* and *3 Feet High and Rising*, we would have to sell them for, I don’t know, \$159 each just to pay all the royalties from publishers making claims for 100 percent on your compositions.” Allen’s hypothetical \$159 CD refers to the cumulative costs associated with tracking down the owners and obtaining the proper licenses to clear the one hundred to two hundred samples on each of those early Public Enemy albums.

Many of the musicians, lawyers, and record company executives we interviewed have made similar claims regarding the costs of licensing numerous samples in a single composition. Danny Rubin, who runs a firm that clears samples for artists and record labels, tells us

that today it is impractical to license songs with two or more samples. Given this, no wonder that the Beastie Boys never attempted to follow up on *Paul's Boutique's* densely layered collages. On the Beastie Boys' album from 1992, *Check Your Head*, they used drastically fewer samples, and traditional instruments comprised most of that album's instrumental bed. "The way I always heard it," says Money Mark, who played keyboards on *Check Your Head* and later albums, "was that their accountant told them that they couldn't make any money with all those samples, so they tried a different route."¹⁰ Mario Caldato Jr., who worked as a recording engineer on *Paul's Boutique*, estimates that 95 percent of the sounds on that record came from sampled sources, and that "they spent over \$250,000 for sample clearances."¹¹

As Posdnuos of De La Soul remembers, "I think *Stakes Is High* [1996] was the first album we recorded where we actually sat down in the beginning of the album, and the record company went through a list, 'Well, George Clinton is in litigation with Westbound [Records], so don't mess with his stuff right now.' Or, you know, 'Serge Gainsbourg, you sampled him for the second album, but his estate—he died, and his family's trying to get control of his estate—don't mess with him.' Or, 'George Harrison don't like rap, don't mess with him.' We actually had a list of people *not to touch*." And De La Soul's Trugoy complains, "You kind of have to do the work before you even do the creative end of things. That's what's kind of messed up about sampling, in some cases. You know, when you create a song and you think, 'All right, this is hot, this is it, right here.' And then you hand the work in to the lawyers to go clear. And either the numbers are just so crazy that you don't want to pay that kind of money, or some people just clearly say outright, 'No, you know, you're *not* using my stuff.' It kind of spoils the creative process."

By the 1990s, high costs, difficulties negotiating licenses, and outright refusals made it effectively impossible for certain kinds of music to be made legally, especially albums containing hundreds of fragments of sound within one album. Reflecting on the current state of the art of sampling, Kyambo "Hip Hop" Joshua says, "Now it's like, 'I like that beat. I'm just gonna use this one Isley Brothers sample, and that's it.' . . . It ain't that complex no more." And Mr. Len adds, "Nowadays, because of people getting into trouble with samples, or having to pay a lot for more than one sample, it's forced a lot of people now to rework their

styles. To me, it took a lot away from where the music could have gone." Given the cumulative effect of multiple expensive samples and administrative hassles, one can see why the sample-laden albums like Public Enemy's *It Takes a Nation*, De La Soul's *3 Feet High and Rising*, or the Beastie Boys' *Paul's Boutique* (all released in 1988 or 1989) couldn't be made today—or at least couldn't be distributed through legitimate channels.

With the golden age of sampling long gone, the music industry's conventional wisdom recommends clearing even the most fragmentary uses. For example, on Jay-Z's song "Takeover" (from his album *The Blueprint* from 2001), the rapper felt compelled to get permission to use a single word in his lyrics. Hip Hop—one of the managers of Kanye West, who produced the music for "Takeover"—told us that Jay-Z's record label got clearance from David Bowie not because West sampled a sound recording but because of the way Jay-Z uttered a single word. In the song, he raps, "I know you missin' all the FAAAAAAME!"—imitating the phrasing from Bowie's 1975 hit "Fame"—"Nigga, you LAAAAAAME!" Significantly, this didn't provide the hook of "Takeover"; Jay-Z just said it once in passing in the middle of a verse. It's the kind of referential vocal phrasing that occurs all the time in music. Copyright law actually permits such "sound-alike" recordings. But in the risk-averse world of the major labels, the rules are different:

HIP HOP: Like when he said, "Fame," that was an interpolation of a David Bowie record. Jay didn't sample that record, but he said it just like David said it, in the same context.

KEMBREW: Are you saying that you have to get permission if you end up sounding like David Bowie when you just say the word "fame"?

HIP HOP: Yeah, if you *sound* like him. . . . If you say a hook like somebody else said it, or you say a phrase like somebody else said it. Sometimes it can be a short saying, and [the copyright owners] will be like, "Okay, whatever." Like Jay might start a record off singing a little bit of Biggie verse, and depending on how long that verse is determines whether the person who owns it wants to come in and say, "Hey, we want a percentage of that," or, "Don't worry about it."

Many artists, scholars, and critics have argued that the growth of twentieth-century jazz music would have been similarly stunted if the jazz musicians of the time—who regularly riffed on others' songs—had

to obtain permission or a license from music publishers for the use of every sonic fragment they improvised upon. Others disagree that the sample clearance system has had any negative impact on creativity. One of these dissenters is Dean Garfield, vice president of anti-piracy at the Motion Picture Association of America (MPAA), who formerly worked for the Recording Industry Association of America (RIAA). He doesn't believe that the requirement to clear samples hindered anyone's music. "If one person doesn't clear a snippet, you could just use another snippet from someone else who would clear it," says Garfield in denying Chuck D's assertion that the sample clearance system changed the way Public Enemy made music. "I think Chuck D may say that today because he finds it convenient to say that. But it's not true."

SAMPLING CONTROVERSIES HEAT UP IN THE NEW MILLENNIUM

The other person who was being sampled, their attorneys got up and said, "Well, hey, where's my piece?" That's when all the lawsuits started happening.—SHOSHANA ZISK

The copyright conflicts that began swirling around sampling in the 1980s certainly haven't gone away. Indeed, the disputes have only intensified and expanded in recent years. And it is probable that they will continue, because every major label likely owns and distributes numerous ticking time bombs waiting to be ignited by a copyright infringement lawsuit. A quarter century of nonstop sampling undoubtedly has produced a very large number of uncleared samples that are embedded in hundreds of albums released by major labels. Even though some of them have been discovered, many of our interviewees believe that a huge number have gone undetected—for the time being, at least. Lawsuits can arise long after a sample-based album was made.

The potential for sampling lawsuits increased after the *Bridgeport Music v. Dimension Films* case of 2005, a case we mentioned in the introduction that centered around an N.W.A. song from 1991 titled "100 Miles and Runnin'." This gangsta rap song was used in the film *I Got the Hook-Up*. The song sampled two seconds and used three notes from a guitar solo taken from the Funkadelic song "Get Off Your Ass and Jam." The sample was looped by N.W.A. and repeated intermit-

tently throughout the song, where it was placed fairly low in the mix to provide a texture rather than a central hook. A federal appellate court concluded that N.W.A.'s use was an infringement of the law and infamously declared, "Get a license or do not sample." The floodgates opened after *Bridgeport* with several high-profile lawsuits targeting classic hip-hop albums such as Notorious B.I.G.'s *Ready to Die* and Run-DMC's *Raising Hell*. Both of these albums, important contributions to hip-hop culture, were removed from record store shelves and from online vendors after copyright infringement suits were filed.

The Notorious B.I.G. case centered around a sample of "Singing in the Morning," a song by a funk band from the 1970s named the Ohio Players, which Biggie and the producer Sean "Puffy" Combs (a.k.a. Puff Daddy, P. Diddy, or Diddy) sampled for the title track of *Ready to Die*. They were found liable for infringing the copyright of both the sound recording, which was owned by Westbound Records, and the underlying composition, which was owned by Bridgeport. After the injunction, *Ready to Die* could no longer be sold lawfully, and the trial court also awarded over \$4 million combined to Westbound and Bridgeport. The plaintiffs and defendants could not reach a licensing agreement in the wake of the lawsuit, and thus the only way *Ready to Die* could return to the legitimate marketplace was to remove the offending sample and completely remaster the album, an expensive proposition. While the new version of "Ready to Die" still features Biggie's smooth vocal flow—which is part of the album's appeal—a side-by-side comparison demonstrates that the reworked version loses something aesthetically.

One of the more unexpected sample-related lawsuits in recent years—perhaps reflective of the post-*Bridgeport* landscape—was the lawsuit brought by the Knack in 2006. The Knack alleged that Run-DMC sampled the guitar riff from their hit from 1979, "My Sharona," without permission in the rap group's track from 1986 titled "It's Tricky." The lawsuit was unanticipated because even though "It's Tricky" was a Top 40 radio and MTV hit, the guitar sample had gone undetected by the band for twenty years. If one pays close attention to the two songs, one can hear the similarity; however, a lot of rap and rock fans surely missed this Knack sample because it was detached from its original context. The reworked Knack riff embedded in the Run-DMC song is so minimal and generic that it could come from almost any new wave song from that era. There was nothing particularly unique about it.

Another interesting twist in the Knack versus Run-DMC lawsuit story was that the primary hook that runs through "It's Tricky" actually derives from a different song from the same era: Toni Basil's "Mickey." According to the recollection of DMC, one of the group's two MCs, they got the idea for "It's Tricky" from a rhyming routine done by the old-school rap group the Cold Crush Brothers, in which "they'd use a melody from another record and put their names and words in there." Explaining how Run-DMC's song was based on Basil's "Mickey," DMC states, "I just changed the chorus around and we just talked about how this rap business can be tricky to a brother."¹² If you are familiar with both songs, compare "Hey Mickey, you're so fine / You're so fine you blow my mind, hey Mickey!" with "It's tricky to rock a rhyme / To rock a rhyme that's right on time, it's tricky!" Same cadence, rhyme scheme, and nearly identical sing-along hook. It is somewhat ironic that the song that Run-DMC borrows much more from was *not* the one that caused them legal hassles, in part because of the way the law treats distinct forms of musical borrowing quite differently.

The Knack versus Run-DMC lawsuit and others like it have implications for any major or independent record label that has ever put out a sample-based album, as well as movie and television studios, other content providers, and music distributors (both online and off). For instance, when the Knack sued Run-DMC it also sued iTunes—Apple's online music store—as well as Amazon, Napster, Yahoo, and others that sold either CD or MP3 copies of the song. The lawsuit alleged that these distributors were also liable for copyright infringement, despite the improbability that any of these companies was aware of the sample or knowingly conspired to distribute an infringing product.

This kind of legal "gotcha" game has turned into a bankable business strategy. Kyambo "Hip Hop" Joshua tells us about a friend of his who represents a widely sampled music catalogue. This person makes a nice living extracting money from downstream users and distributors who have not secured licenses for samples of the copyrighted music he controls. Hip Hop says that his friend is strategic about the way he goes about licensing his copyrights. "What I mean by that is he'll do a license with someone who wants to release a record, and he limits to album-only rights, which means you can only release the record," Hip Hop says. "Then a song from that album gets licensed in a commercial or a movie and—lo and behold—now he can go to the movie company

or the advertising company and require them to license it, even though that movie company had no idea what was going on, and they assumed everything was okay."

Hip Hop reminds us that one doesn't need to know about a potential infringement in order to be liable for it. This was the situation in *Bridgeport* when the production company Dimension Films included N.W.A.'s "100 Miles and Runnin'" in its movie *I Got the Hook-Up*. Even though producers and executives at the movie company likely had no idea that N.W.A. had embedded an unauthorized sample in its song, Dimension was still liable for copyright infringement because it had not obtained permission for its indirect use of the sample in its film.

SAMPLING AS A HARBINGER OF FUTURE CONTROVERSIES

A wide range of critical commentary, mostly awful but some brilliant, has exploded on the Internet, as more have come to master the remix capabilities of digital technologies. . . . The potential of this technology is extraordinary. Its artistic potential is obvious; its political potential is just beginning to be glimpsed. . . . Yet this form of speech—remix using images and sounds from our culture—is presumptively illegal under the law as it stands.—LAWRENCE LESSIG,
"Free(ing) Culture for Remix"

Beyond the ticking time bomb that film studios, television companies, music retailers, and other distributors face as a result of unlicensed samples lies another set of licensing quandaries. These complex scenarios result from two now-familiar technological developments. The first, personal computers with widely available and even preinstalled software, allows people to edit music and video in ways that were impossible or prohibitively expensive in previous decades. The second, Internet connectivity (especially the advent of broadband), allows people to distribute widely the fruits of their creative production at an extremely low cost. Together, these technological advances make it easy to access a copyrighted work; combine it with other copyrighted works, which may themselves incorporate still other copyrighted works; add one's own sounds or images; and distribute the recombined product across the world in seconds, making thousands of copies in the process.

This sequence of events—once the domain of entertainment industry professionals alone—is now an everyday occurrence that can be accomplished by amateurs. But can modern copyright law and current licensing practices handle so-called user-generated content? Digital sampling has a lot in common with YouTube’s plethora of videos that often remix existing material. Both trends reflect the plummeting cost of sophisticated recording and editing software. As the hip-hop journalist Jeff Chang explains:

Sampling is the kind of technology that’s really shifted the way that people consume and produce culture. It used to be the kind of thing where a record company would have a record to produce, and they’d put all kinds of money behind it, and they’d send it down to you, the consumer, and you were supposed to passively accept it and buy it and enjoy it and dance to it—*Saturday Night Fever*, or whatever. Instead, these days what you have is people that are listeners and fans of the music being able to do their own remixes with technology, to do their own mash-ups, to do their own versions and to redo this type of stuff and to put that out into the world. So, the consumers have become producers, and this has taken a lot of power away from the record companies.

Understandably, the owners of copyrighted material are interested in asserting whatever legitimate rights they have regarding how their works are used. We know that copyright law protects the music industry from copycat record companies that sell exact or substantially similar copies of the original work. But can copyright law protect the music industry from competition that comes from its own customers, that is, the general public?

Copyright law, whether through Congress or the courts, has already reacted to the power of contemporary personal computers and network technology on multiple fronts, most prominently in the area of file sharing. The act of downloading and uploading copyrighted files is understood to violate the law.¹³ Under certain conditions, the makers of file-sharing software will be liable for contributory infringement based on the illegal activity of their users.¹⁴ Perhaps this approach has struck an acceptable balance and allowed a legitimate market for downloaded music to develop on iTunes, Wal-Mart, Rhapsody, eMusic, Amazon, and other sites. Or perhaps the law has unnecessarily stifled the music-splunking delight of services like the original Napster and

merely pushed underground whatever forms of file-sharing software are currently in existence.

Whatever one’s conclusion about the correct policy, the dispute over file sharing forced the law to react to technological change and grapple with the complex issues involved in it. Lawsuits have also forced the courts to respond to sampling, which presents quite distinct legal issues from file sharing. But, with some exceptions, courts have not addressed sampling in a thorough or farsighted way. Instead, courts helped bring the golden age of sampling to an end, often without attention to the consequences for creativity. Anyone intrigued by the potential for remix culture to change entertainment, or even to change our public discourse, has an interest in seeing both public and private institutions address digital sampling in a more productive and realistic manner.

Battles over how copyright should respond to technological change, cultural trends, and new musical practices cannot be settled in an abstract way based on extreme points of view on either side. Only by studying the history of sampling and working toward a compromise among all competing interests can we find a path toward a sensible copyright policy that can govern remix culture. An engagement with particular practices in the real world will allow us to find the right balance between copyright and the public domain, between licensing and unfettered use, and between compensation and access. In this spirit, chapter 2 places digital sampling in its proper context within the larger history of sound collage in its many diverse forms.

2

A LEGAL AND CULTURAL HISTORY OF SOUND COLLAGE

Fundamentally, sampling is a form of the fine arts practice of collage, but one that is done with audio tools rather than scissors and glue. Collage itself is a hundred-year-old artistic practice, and it flourished throughout the first three-quarters of the twentieth century. Visual artists such as Marcel Duchamp, Pablo Picasso, and Robert Rauschenberg regularly appropriated from images and texts made by others; similarly, writers like T. S. Eliot, James Joyce, and William Burroughs cut up other people's words in their literary experiments. Paul Miller, a.k.a. DJ Spooky, points to other areas of art and culture that use collage as their primary creative method. "Sampling usually is viewed as a musical thing," he says, "but if you look at the art world, for example, you have Andy Warhol taking photographs and painting them. You have different photographers taking certain scenes and reconstructing them, digitally. It all implies a layer of collage and pulling together bits and pieces."

Don Joyce of the group Negativland, who studied collage in school during the 1970s before joining the group, says that "the first instances of what could be called collage happened in the late-nineteenth century, with people taking photographs of different things and cutting them up and pasting them into what would become a postcard for the tourist trade." As he explains further, "You would have a picture of the horse and wagon with a giant cucumber on it, late-1800s humor, or a

huge fish in the back of wagon—a juxtaposition of different things to make funny little pictures." These sorts of collage practices were popular during the nineteenth century, though collage—as a recognized "artistic" method—was not properly canonized until the beginning of the twentieth century when the avant-garde art movement known as Dada emerged. With the popularization of the phonograph occurring the same time that Dada shook up the art world, the seeds of sound collage had been planted.

SOUND COLLAGE IN POPULAR MUSIC AND THE AVANT-GARDE

We were cutting up classical music and making different size loops, and then I got an engineer tape on which some test engineer was saying, "Number nine."—JOHN LENNON, on "Revolution #9,"
quoted in Barry Miles, *Paul McCartney*

The first documented use of the phonograph for anything other than straightforward playback occurred in 1920, when the experimental composer Stefan Wolpe performed a piece that used eight gramophones playing different records at a variety of speeds.¹ Between the years 1922 and 1927, the French composer Darius Milhaud would vary the speeds of multiple simultaneously running phonographs in order to generate a collage-like effect. Several other avant-garde composers flirted with the possibilities afforded by the phonograph in the 1920s, but these experiments ultimately generated little direct impact on avant-garde music composition techniques.² Although one could hardly call these efforts a movement, it was at this point that the method began.

A few decades later, the American composer and conceptual artist John Cage used the phonograph to produce, in his words, "hitherto unheard or even unimagined sounds."³ In addition to manipulating the phonograph and radio, Cage also experimented with magnetic tape, crafting a piece he called *Imaginary Landscape No. 5* in 1952. Cage's instructions asked for any forty-two records to be "treated as sound sources, rather than being what they were."⁴ This was a radical move at the time, though the technique is par for the course in popular music production today. Other Cage works that arranged "found" sound fragments included *Williams Mix* and *Fontana Mix*, both of which used

everyday sounds such as street noise, coughing, swallowing, cigarette smoking, and other ephemera.⁵

Musique concrète—an important, pioneering sound collage technique—was developed in Europe during the late 1940s and 1950s. The phrase was coined by the engineer and radio announcer Pierre Schaeffer, who began experimenting with recorded noises captured on magnetic tape shortly after the Second World War.⁶ As the art historian Glenn Watkins writes, “Pierre Schaeffer’s *Étude aux chemins de fer* (1948), a three-minute early classic of its kind, assembled and juxtaposed the sounds of railway trains for a ‘concert of noises’ that was broadcast over French radio.”⁷ During the mid-1950s, many musicians and composers, such as Karlheinz Stockhausen, were attracted to this compositional strategy.

“The early history of electronic music was closely allied with tape,” writes Watkins, “and editing techniques involving splicing and overlay were by definition akin to notions of collage investigated in painting, literature, music, and the cinema in the early decades.”⁸ A decade after Stockhausen began his work, James Tenney, a young American musician and composer, created a piece titled *Collage #1 (Blue Suede)* in 1961. He reworked portions of Elvis’s rendition of the rockabilly classic “Blue Suede Shoes” by slowing it down, chopping it up, and altering its tempo.⁹ He wasn’t sued for this, most likely because his work came from so deep within the esoteric sound-art world.

Within popular music, the earliest example of quoting directly from a sound recording was Bill Buchanan and Dickie Goodman’s hit from 1956 “The Flying Saucer,” the first of many “break-in” records the two created (Goodman also created several “solo” records, working through the late 1980s). “The Flying Saucer,” a skit about an alien invasion as told through then-current rock ‘n’ roll hits, was composed by Buchanan and Goodman on a reel-to-reel magnetic tape recorder. “Buchanan and Goodman cut up hits of the 1950s,” says Don Joyce, who heard the recordings as a kid. “They were all little spliced up bits of song that can be used with a narrator so it was a song lyric that would finish the narrator’s sentence, as a little joke.”

Imitating the radio broadcasts of *War of the Worlds*, Buchanan and Goodman use a fake radio announcer who is interrupted by short fragments from pop songs—something that creates a jarring, goofy collage of sound: “Radio Announcer: The flying saucer has landed again.

Washington: The Secretary of Defense has just said . . .” Then Fats Domino breaks in, singing, “Ain’t that a shame.” Elvis appears, as do many other stars. The record sold over a million copies and inspired a host of imitators. A few song publishers went after Buchanan and Goodman by filing copyright infringement lawsuits. The duo’s legal problems prompted them to release the totally unauthorized piece “Buchanan and Goodman on Trial” later that year.

This delirious single swiped the *Dragnet* theme, among many other popular songs from that era. Buchanan and Goodman cast Little Richard as their defense attorney, and he argued before a jury of Martians. Taking the bait, four labels (Imperial, Aristocrat, Modern, and Chess) and two performers (Fats Domino and Smiley Lewis) filed for an injunction to prevent the sale of all Buchanan and Goodman recordings. They also asked for \$130,000 in damages. But Judge Henry Clay Greenberg denied the injunction because he believed that the single was clearly a parody and not a violation of anyone’s copyright. The judge stated that they “had created a new work,” rather than simply copying someone else’s music.¹⁰

“I think that is pretty much where the lawsuits began,” says Don Joyce. “I don’t think any of the classical composers got sued for using anyone else’s music, but as soon as collage appeared in popular music, you had a mass commodity that was worth a lot of money. People got protective about it and proprietary about it.” The British sound artist Scanner observes that today there is a certain amount of freedom in the visual art world when it comes to appropriating copyrighted material. “You can simply get away with a lot more in terms of reference points than you can with sound,” Scanner says. “The lawyers seem to be a lot faster with their running shoes to get to the musicians than in the art world.”

The Beatles’ “Revolution #9” is perhaps the most widely heard example of the avant-garde technique of *musique concrète*. The basic rhythm for “Revolution #9,” released in 1968, was built from the sound of twenty tape loops pillaged from the archives of EMI, the Beatles’ record label, and they worked several other sound sources into the lengthy eight-minute, twenty-two-second track.¹¹ Although the Beatles obviously had implicit approval to chop up EMI’s material, it is highly unlikely that the Beatles paid any royalties or secured formal permission from the original performers or song publishers. (For the famous *Sgt. Pepper’s*

album cover—the picture-perfect definition of collage—it is unclear as to whether the group or its label secured copyright permissions for all the photos they appropriated from; they did, however, get signed photo releases from all the living celebrities who appeared on the cover.)

Though credited to Lennon and McCartney, “Revolution #9” was composed solely by Lennon and Yoko Ono. The pair went on to feature similar cut-and-paste techniques throughout several of Ono’s solo albums, as well as on their collaborations *Two Virgins* (1968) and *Wedding Album* (1969). Despite her undeserved reputation as a groupie, Yoko Ono was an important figure in the avant-garde art world at the time. Before meeting Lennon, she had performed with Ornette Coleman, La Monte Young, and John Cage. She also had deep ties with the Fluxus movement, an art scene in the 1960s that, according to a manifesto from 1965, was “the fusion of Spike Jones, Vaudeville, gag, children’s games and Duchamp.”¹²

In collaboration with seminal avant-garde figures, Ono launched what became known as the Chambers Street Series—ground zero for New York’s experimental art and music scenes in the early 1960s. “The sound collage thing I did,” she tells us, “I collaged it myself. In *Yoko Ono/Plastic Ono Band*, if you listen to it again you will hear that I did an incredible amount of collage. . . . Most people think that the *Plastic Ono Band* record was improvisational, with adlibs, but I just made it *sound* like that. When you listen to ‘Greenfield Morning,’ you will see that it was a very, very aggressive collage that was done.”

Brian Eno and David Byrne’s *My Life in the Bush of Ghosts*, released in 1981, is another key album that music critics frequently cite as bringing sampling and sound collage into popular culture. On this record, Talking Heads frontman David Byrne and the pop experimentalist (and soon-to-be U2 producer) Brian Eno appropriated a plethora of voices and sounds. It is very much a logical extension of the earlier avant-garde sound collage tradition, one that includes Ono, Stockhausen, Tenney, and others. “Oh yes,” Byrne tells us, “we were both aware of *musique concrète*—and of course pieces by Steve Reich, Alvin Lucier, and others that used a recorded voice as the raw material were known as well.” Here Byrne refers to “new music” pioneers such as Steve Reich, whose piece *It’s Gonna Rain* incorporated two recorded tracks of a street preacher shouting “It’s gonna rain” that ran simultaneously, though slightly out of synch.¹³ The piece clearly influenced *My Life in the Bush of Ghosts*.

Even though the album didn’t have a massive impact in terms of chart success, it nevertheless influenced a wide range of musicians, including DJ Spooky, who tells us, “Probably my favorite album, looking at early sampling, is *My Life in the Bush of Ghosts*.” Working when digital recording technologies had yet to be refined, Eno, Byrne, and their engineers laid down their tracks on analog equipment, synchronizing the vocal “samples” manually. Their stature in the music industry gave Eno and Byrne access to good recording studios and the money to pay for the necessary equipment that allowed them to craft their collages. But for those who could not afford this luxury, a new wave of consumer electronics and home recording equipment allowed a D.I.Y. sound collage scene to bloom during the 1980s.

THE CONTEMPORARY SOUND COLLAGE UNDERGROUND

I’ve always seen myself as an editor of life—just by the very fact that I’m cutting, pasting, rearranging, and layering. I like the idea that I’m in control of various elements, putting them together in a way that I don’t think they have gone together before.—VICKI BENNETT

The Tape-beatles formed in Iowa City, Iowa, in 1986, though the key members have since relocated to Prague, where they remain active as a creative unit. “When we started we really wanted to do the kind of work that anyone could do in a bedroom,” says John Heck, a founding member. “Our sources were radio, television, and vinyl LPs. We had a cassette player, a cassette recorder; we had a simple Sony reel-to-reel tape deck.” In the 1980s, home-recording devices became relatively inexpensive and available to more people, which is one of the reasons why sound collage exploded during that time. Lloyd Dunn—another member of the Tape-beatles who also published a highly regarded series of photocopied ’zines titled *Retrofuturism* and *Photostatic*—explains the origins of the group’s name as follows: “What we wanted to do was exploit the possibilities of recording and audiotape, and in a sort of cheeky move, to pay homage to the Beatles and their studio recording experiments in the 1960s.”

In another mischievous move, the Tape-beatles adopted the phrase “Plagiarism: A Collective Vision” as their de facto motto. They also

claimed to have trademarked the word “plagiarism,” and, to top it all off, their logo consisted of the AT&T “globe” logo with Mickey Mouse ears attached.¹⁴ Although the Tape-beatles were certainly aware of avant-garde sound collage traditions, Dunn says that their attitudes and positions on collage largely stemmed from their engagement with popular culture. He tells us that that “our first impulse in getting together was to form a pop music group that didn’t play any instruments.” He further describes the Tape-beatles’ methodology in a way that echoes statements made by many of the artists we interviewed: “Essentially, we tried to build our work around home stereo equipment, because one of the things that we wanted to say was that this was an egalitarian effort.”

Similar in spirit to the Tape-beatles, the West Coast sound collage collective Negativland began self-releasing records in 1980. Mark Hosler, the group’s unofficial spokesperson, tells us that they were simply teenagers reacting to a media-soaked environment. “There was also something that was really appealing to us about taking sounds from our world around us. And this wasn’t an intellectual thing, and it wasn’t a political thing,” Hosler says. “I was only sixteen years old. It just sounded really cool . . . and there was something that was really appealing about taking things out of their context, and putting them in a new context.” Being mostly teenagers when the group first got together (aside from Don Joyce, who is older than the other members), Negativland initially didn’t know much about avant-garde composers like Cage, Tenney, and Schaeffer.

“I was doing radio first, before Negativland,” Joyce says. “I was kind of into the whole idea of taking things and editing them, using them in some new way. And then Negativland came along and it fit right in.” His radio show *Over the Edge* began in 1981 at the Berkeley-area station KPFA, which broadcasts at 59,000 watts and covers half the state of California. As Hosler recounts, “KPFA had all kinds of reel-to-reels, tape decks and turntables, and auxiliary inputs and mixers, and extra studios with microphones and you could put callers on the air.” After absorbing Joyce into the group, Negativland took full advantage of the radio station and its equipment. “Immediately, we just started playing four records at once and turning everything backwards, and stopping and starting stuff, and bringing in tape loops, and putting the phone

callers on the air,” says Hosler. Today, Negativland has over two-dozen CD releases to their name—including the classic *Escape from Noise* from 1987—and they continue to broadcast the longest-running free-form radio show in North America.

Compared to his contemporaries, the Canadian composer John Oswald took the appropriation of popular works to an extreme, at least with regard to the quantity of sources he draws upon. His work recalls James Tenney’s *Collage #1 (Blue Suede)*, in that Oswald recombines recognizable segments of well-known songs in an unapologetic manner, a method he calls “plunderphonics.”¹⁵ The point of the plunderphonic technique is to create some sort of recognition before the musical segment cuts out and another brief sample is introduced—thereby causing some sort of confusion, disorientation, or cognitive dissonance. Since the mid-1980s, Oswald has released several plunderphonic works, the most interesting of which is *Plexure* (1993). The album’s artwork is a visual collage of the album covers for Bruce Springsteen’s *Born in the USA*, Bobby Brown’s *Bobby*, and Garth Brooks’s *The Chase*. This combination creates a sort of pop-music Frankenstein’s monster, which in turn acts as a metaphor for the compositions contained within. For this work Oswald plundered hundreds of Top 40 songs from the 1980s and 1990s and pieced them together like a jigsaw puzzle to produce a jarring but flowing nineteen-minute CD.

Like the artists mentioned above, or perhaps more so, the British collage artist Vicki Bennett balances her avant-garde sensibilities with a dose of goofiness. As the British experimental-music magazine *The Wire* observes, “Unlike others working in similar audio-collage terrain, her work largely sidesteps the opportunity for social commentary (think back to such classics of the genre as Steinski & Mass Media’s ‘The Motorcade Sped On’ or Negativland’s *Escape From Noise*) and plunges instead into a freeform, unfolding imaginary landscape that is liberally peppered with slapstick.”¹⁶ Bennett—who performs under the name People Like Us—demolishes the demarcations between high and low culture as well as “seriousness” and “humor” in music. As Negativland’s Mark Hosler observes, “A great example is Vicki Bennett’s work, People Like Us. Her work tends to be wacky and weird and goofy and fun to listen to, and not so clearly a critique of anything in the way I think our work is.”

Today, Bennett works with both sound and moving images, but when she began doing collage work around 1989 she realized that analog video editing suites were financially far out of her reach. Video was not yet something one could do on a home computer, which is perhaps another reason why sound collage exploded before its moving-image equivalent. As a result, she says, “I defaulted to sound and bought an Amiga computer,” referring to the brand popular among computer enthusiasts in Europe. By chance, the person who sold her the computer had already installed sound programs on it, including a piece of “tracker” software that functioned as a sequencer that could arrange samples. “So I bought a cartridge sampler and started working with samples, and at the same time I was working with a mixer and doing lots of layered sounds.” It was around this time that she began listening to collage-based works by artists like Nurse With Wound and Negativland. “I wasn’t aware of any movement going on,” Bennett says. “That was before the days of the Internet, when it wasn’t so easy to do a search of things.”

Today’s sound collage underground is diverse and decentralized, with many individuals doing similar work. As such, this section should be understood as a brief overview—a sampling, so to speak—of some of the more notable figures that have emerged in the past quarter century. A full accounting of this scene would need to include Wobbly, Evolution Control Committee, and several others. For brevity we will close the section with another British artist, Robin Rimbaud, who is better known as Scanner. Rimbaud chose his stage name because he began his sound-art career by sampling cellular telephone conversations, short-wave radio broadcasts, and other ephemera snatched from the airwaves with a scanner.¹⁷ Like many of the underground sound collage artists we interviewed, Scanner tells us pop music and the avant-garde influenced him equally. “I think there’s been a very clear link between the more academic compositional world of collage and the popular music world,” Scanner says. “I’ve grown up living between the two. I grew up listening to awful glam rock records that my brother played me, and Beatles records. In listening to my more experimental music, I realized there was a relationship between the two. There’s a very clear relationship.”

“SAMPLING” IN OTHER CONTEXTS

Look at how every great poet made culture, how Homer made culture. It’s all about collage. It’s about taking the bits and pieces of your influences and forging them into something newer and stronger.—SIVA VAIDHYANATHAN

Musical borrowing practices touch many areas of cultural life, and thus go far beyond the rarified worlds of avant-garde sound collage. “The thing that’s really interesting about sampling is that we all do it,” argues Jeff Chang, author of *Can’t Stop Won’t Stop* and other books on music and culture. “We’ll pick up a catch phrase, or we’ll hear a song and we might sing it again on the street, or that kind of thing. And the technology has allowed us to be able to immediately go to those source thoughts, source ideas, source moments, and to actually work with them creatively.” Matt Black, co-founder of the seminal British cut-and-paste group Coldcut, believes that sampling operates as a metaphor for the way people participate with culture more broadly. “You could say that humans are just sampling machines,” he tells us. “We all learn by taking in what we hear and see and trying to imitate it, and output it again. That’s how we learn to speak. That’s how we learn to paint and make music as well.”

We can find plenty of evidence of musical borrowing in the European classical and art-music tradition. Brahms’s First Symphony borrowed musical phrases from Beethoven’s Ninth Symphony. After listeners noted the strong resemblance between the middle strain of the main theme of the finale to his symphony and the middle strain of Beethoven’s “Ode to Joy,” Brahms snapped, “Any jackass can see that.” One can also hear elements of Beethoven’s Ninth in Mendelssohn’s *Lobgesang*, as well as in a great deal of Wagner’s body of work. And in composing the introduction to his Third Symphony, Mahler swiped a major theme from Brahms’s Beethoven-biting First Symphony—converting it into minor mode but keeping the melodic structure intact. When someone pointed out to Mahler the fact that those two pieces were so similar, he echoed Brahms’s earlier retort by saying, “Any fool can hear that.”¹⁸

The hip-hop journalist and activist Harry Allen states, “I’ve never heard a completely original musical idea, *from anyone*. Most musicians will say that the best musicians copy.” Debussy was another composer

who is widely acknowledged to have borrowed heavily, such as in “Golliwog’s Cakewalk” from his *Children’s Corner* suite (1906–1908). By cutting and pasting, and by moving back and forth between American ragtime music and Wagner’s *Tristan*, Debussy’s piece anticipates the “postmodern” forms of composition that would become common by the late twentieth century.¹⁹ The composer Charles Ives, in his *Flanders Field* (1917), set John McCrae’s wartime poem “Flanders Fields” to music that interpolated several songs familiar to Ives’s audience: “Marseillaise,” “America,” and “Columbia, Gem of the Ocean.” As Glenn Watkins writes of the listening experience: “Memory, nostalgia, and fantasy potentially flood the listener, and composite citation encourages intertextual interpretation without freezing the message.”²⁰

Igor Stravinsky often borrowed from traditional folk music, particularly in his work *Le Sacre du printemps* (1911–1913). In Watkins’s book *Pyramids at the Louvre*, he quotes Stravinsky as saying, “Whatever interests me, whatever I love, I wish to make it my own.”²¹ The anxiety that haunts many modern artists—an anxiety that they are actually creating nothing new under the sun—is something that has been pervasive within Western culture during the last two centuries. Stravinsky confronted this “anxiety of influence” by using in his own work methods of adoptive transformation and appropriation. In his autobiography *My Musical Life* an irritated Stravinsky addressed music critics who, “having noticed, both in *The Snow Maiden* and *May Night*, two or three melodies borrowed from collections of folksongs (to notice they were powerless, as they were ill-acquainted with folk creation), proclaimed me incapable of creating my own melodies.”²²

Stravinsky was one of many European composers who borrowed from folk melodies. Another notable appropriator was Johannes Brahms, who was quite obsessed with the songs of his youth. He arranged well over two hundred folk tunes in his lifetime, and some of these melodies found their way into his art song compositions, such as *Sehnsucht*. Brahms’s most significant and highly regarded use of folk song material was his *Deutsche Volkslieder* for voice and piano. The biographer Malcolm MacDonald writes that they are “a series of miniature masterpieces worthy to stand with any of his art songs of the same period.”²³ Brahms loved these little works as much as his major compositions, perhaps more so.

Walter Ong, in his classic book *Orality and Literacy*, argues that print

culture attempts to close off intertextuality by emphasizing the importance of a pure text that is supposedly untainted by the influence of other texts.²⁴ Of course, this is an impossibility—a fiction generated by this anxiety of influence. Traditional folk singers, for instance, did not share this uneasiness about the “originality” of the songs they performed; there was no framework in which they could even conceive of such a thing.

The impulse to appropriate from—and intervene in—popular culture was prominent in the folk music that emerged in the first half of the twentieth century. By recycling folk melodies and adding his acerbic words to them, Woody Guthrie fought for the rights of workers and battled the rich folks through song. As Guthrie wrote in his journal of song ideas, for example: “Tune of ‘Will the Circle Be Unbroken’—will the union stay unbroken. Needed: a sassy tune for a scab song.” In another episode, Guthrie discovered that a Baptist hymn performed by the Carter Family, “This World Is Not My Home,” was popular in migrant farm worker camps. But he felt the lyrics were politically counterproductive. The song didn’t deal with the day-to-day miseries forced upon workers by the capitalist class but instead told them they’d be rewarded for their patience in the next life. It was basically telling the workers to accept hunger and pain and not fight back.

For Guthrie that innocent-sounding song was evil and insidious, so he mocked and parodied the original. He kept the melody and reworked the words to comment on the material conditions of the world that many suffered through.²⁵ The result, “I Ain’t Got No Home,” is a great example of how appropriation—stealing, borrowing, whatever you want to call it—is a creative act that can have a political and social impact. Woody Guthrie and other folksingers drew from the culture that surrounded them and transformed, reworked, and remixed it in order to write songs that motivated the working class to fight for a dignified life. Instead of passively consuming and regurgitating the Tin Pan Alley songs that were popular during the day, Guthrie and other folk singers created, re-created, and commented on culture in an attempt to change the world around them.

Similarly, during Medieval European carnivals, peasants would sing street songs to the tune of serious church hymns. Christmas carols also became fodder for secular songs that sometimes ridiculed those in power.²⁶ Of course, parodies aren’t always so high minded. There

is a long tradition in many folk music traditions of irreverent and silly appropriations, especially in some strains of Yiddish American music. Mickey Katz was a parodist whose professional peak in the United States occurred in the 1950s, when he recorded a series of “anarchistic, irreverent, and wildly ethnic klezmer parodies of mid-century popular songs,” as Joshua Kun writes in *Audiotopia*.²⁷ For instance, Katz transformed the country singer Tennessee Ernie Ford’s hit “Sixteen Tons” (1955) into an ode to kosher delis—“You load sixteen tons of hot salami / Corned beef, rolled beef, and hot pastrami.”

The Jewish singer also rewrote Patti Page’s “Doggie in the Window” by turning it into another deli-themed ditty, “Pickle in the Window.”²⁸ Even though Katz’s spoofs were whimsical, there was an element of resistance in his songs—particularly the anti-assimilationist streak that was evident in his parodies. Kun writes that not only did they “work at the level of lyrics, they also involved significant Jewish musical interruptions of pop style. Typically about halfway through each parody, Katz would overturn whatever style he was playing and suddenly lead his band, without any warning to the listener, into a spirited klezmer *freilach*.” He then adds, “These jarring, often violent klezmer ‘breaks,’ not at all unlike the role of the break in jazz or hip-hop, served as loud Jewish musical ruptures within the pop structure and style of each song.”²⁹

THE BLACK ATLANTIC

You can also look at the blues and, for that matter, you can look at anything. Melodies have always been borrowed.—SAUL WILLIAMS

The practice of appropriation is an important aspect of African American music, from blues and jazz music to the black folk-preaching tradition that reaches back two centuries. Within these cultures, music and words were treated as communal wealth, not private property. African American religious music, from its very beginnings, was built on borrowing—whether in speaking of Sister Rosetta Tharpe or anonymous church singers lost to time. The ethnomusicologist Cheryl Keyes writes that during the trans-Atlantic slave trade, Africans were forced to learn a new culture and language: “In the face of this alien context, blacks transformed the new culture and language of the Western world

through an African prism.”³⁰ For instance, slaves commonly fused African folk melodies with the Christian lyrics forced upon them by their white owners, allowing them to create the appearance of assimilation while secretly holding onto elements of their culture.³¹

Oral tradition was central to African American culture partly because American laws forbade slaves from learning to read or write; as such it contributed to the ethic of sharing in various forms of black music. It’s doubtful that blues artists such as Leadbelly “wrote” every single song for which they were assigned a copyright; Leadbelly’s song “In the Pines,” for instance, has antecedents in the nineteenth century.³² John Lee Hooker’s “Crawlin’ King Snake” was based on a recording by Tony Hollins made in 1941, which was in turn rooted in a song that Blind Lemon Jefferson recorded in 1926, “That Black Snake Moan.”³³ And Willie Dixon in his autobiography described how Chuck Berry’s “Maybellene” was based on a country song named “Ida Red.” Dixon convinced Berry to simply change “the country & western pace” of the original and give it more of a rhythm and blues feel. With that slight change, the song became Berry’s first hit.³⁴

Jeff Chang talks about the tradition of quoting that is rooted within African American music. “I think sampling is in line with that tradition,” he says. “You’ve got new generations of artists quoting older generations of artists, just to show that they’ve got the knowledge, the bona fides, to be a part of the culture.” Sampling is also an extension of the call-and-response tradition; it’s a kind of musical dialogue that has existed within African American music for centuries. Invoking this call-and-response tradition, the pioneering hip-hop DJ Grandmaster Flash once described the work of the DJ as a dialogic act: “That’s what mixing two songs together felt like,” says Flash. “A question and an answer. One song would ask, the next one would respond.”³⁵ And Jeff Chang adds that “sampling itself is an embodiment of this active process of engaging with history.”

Musicians who were part of the African diaspora not only copied each other’s musical ideas but also did so across geographic boundaries. Paul Gilroy in his book *The Black Atlantic* argues that music is one of the key vehicles of cultural exchange—one that is both multidirectional and dialogic. Members of the African diaspora who were spread across the Atlantic regions of North and South America, Western Europe, and Africa have been “listening in” and responding to each other for years.

For example, American jazz musicians imported the styles of Brazilian bossa nova in the late 1950s; for another, Nigerian Afro-beat pioneer Fela Kuti borrowed from James Brown's funk experiments of the late 1960s (which, in turn, had their roots in African rhythms).

Referring to Gilroy's concept of the Black Atlantic, Christopher Dunn writes in *Brutality Garden*—his book on the Brazilian musical movement from the 1960s named Tropicália—that “together with Cuba, Jamaica, and the United States, Brazil has been a key producer and receiver of musical forms of the Afro-Atlantic world.”³⁶ There is a long tradition of appropriation in Brazilian music and culture, which has a lot to do with the nation's diverse religious and cultural influences being drawn from European, African, and indigenous groups. This ethic of appropriation found its most vivid expression in the modernist Brazilian poet Oswald de Andrade's “Manifesto Antropófago,” or “Cannibalist Manifesto,” first published in 1928. In it, Andrade argued for an aesthetic strategy that devoured both foreign and domestic cultural texts, transforming them in the process.

The cannibalism metaphor resonated within Brazil for many decades afterward. The Brazilian singer Caetano Veloso claimed that Tropicália, the musical movement that brought him to fame, was a kind of “neo-cannibalism” that emerged within, and commented on, the turbulent period of the late 1960s.³⁷ The collectively created album *Tropicália, ou panis et circencis* (1968) was an aural pastiche that combined the talents of Veloso, Gilberto Gil, Gal Costa, and the eccentric rock-fusion group Os Mutantes. “Instead of working as a group in order to develop a homogeneous sound that would define a new style,” Veloso says in explaining the ideas that underpinned the album, “we preferred to utilize several recognizable sounds from commercial music, making the arrangements an independent element that would clarify the song, but also clash with it. In a way, we sought to ‘sample’ musical scraps and we used the arrangements as ready-mades.”³⁸ Discussing both Tropicália and contemporary Brazilian music, David Byrne points out:

They're not the only ones to [appropriate]. Uniquely, though, they made it transparent, visible, and part of the content. You can hear the bricolage happening. I think in many countries you had a generation who grew up with both the local and sometimes traditional music and also the music of the multinational corporations—the Anglo pop tradition that for some time

dominated the globe. They love elements of both: of rock, techno, tango and samba, and they feel free to mix them all together. It flows every which way too, with their recordings influencing the rest of the world as well.

As Alexander Weheliye writes in his book *Phonographies*, “By enabling disparate audiences in a variety of locations to consume black music, sound technologies assured that local calls and responses would differ according to spatio-temporal coordinates, facilitating the emergence and reconfiguration of numerous cultural practices. The phonograph's recalibration of locality effected changes in its relation to other vicinities rather than erasing the local altogether.”³⁹ It is in this sense that American hip-hop, jazz, and blues are deeply connected to 1960s Brazilian pop, 1970s Jamaican reggae, and 1990s jungle (a British subgenre of dance music that featured what are essentially sped-up hip-hop breakbeats dosed with a strong West Indian influence). All are elements of this “Black Atlantic.”

Jamaican reggae, in absorbing many influences and, importantly, heavily influencing other forms of music, is significant in its tendency toward boundary crossing. Hip-hop was directly shaped by the aural innovations of dub, which is a largely instrumental version of reggae that created the template for the modern remix. In dub, the studio engineer—including those such as Lee “Scratch” Perry, King Tubby, or Scientist—is as much a composer or creator as the guitarist, vocalist, bassist, or drummer who recorded the song. These producer-engineers invented “versioning,” which in Jamaican music refers to the practice of releasing different versions of an original recording. This is done by dropping out or reworking the vocals and instrumentation on a soundboard's mixer, extending certain sections of the song, and sonically reinventing other elements of a recording through the use of various gadgets and effects pedals.

The “versions” created by the Jamaican producer-engineers were then disseminated to popular reggae DJs, such as U-Roy, who played them at their parties. Jamaican sound systems were mobile parties that moved from place to place on the island, and the center of attention was the DJ, who often served as an MC as well. For instance, they “toasted” (a precursor to rapping) over the versions and mixed them up with other records they spun. Other musicians and producers regularly copied these versions, and they often scored hits that were little more than

slightly modified renditions of a previously released song. The proliferation of these versions had as much to do with Jamaica's very loose copyright laws at the time as it did with the musical culture from which reggae sprang. As Chuck D tells us, "The whole Jamaican reggae vibe is about how that rhythm doesn't really belong to anybody, but belongs to *everybody*. Same thing in hip-hop. There are some rhythms that kind of belong to everybody and not just one person, you know?"

The reggae artist Mikey Dread explains that even in the "Wild West" that was the Jamaican record industry—especially when dub reggae emerged in the 1970s—producers, artists, and labels feared piracy of their own work. They were nervous about releasing a pure instrumental record because someone else would almost certainly come along and re-release it with new vocals on top of it, getting a free ride. "So they have to put something somewhere in the dub," Dread says. "You don't want a man to take your riddim and go voice it straight like it's his—you have to put your trademark in there to stop the pirates!"⁴⁰

Deeply intertwined are the rise of dub—with its infinite versions—and the ascendancy of the hip-hop DJ. "Versioning is still a central practice of Jamaican pop," the musicologist Michael Veal writes. "As in hip-hop, digital sampling of older music plays an important role in Jamaican music, with the canonized musical gestures of the 1960s and 1970s (horn riffs, the trademark drum rolls of roots-era drummers, or the exclamations of particular DJs) reappearing to provide formal punctuation, timbral variation, and de facto historical grounding."⁴¹ The journalist Greg Tate tells us that there were many Jamaican immigrants in New York City, and he notes that DJ Kool Herc brought this sound-system culture with him from Jamaica to the South Bronx. The participants in hip-hop culture in New York City and reggae culture in Kingston were listening to each other, though the cultural flow from Jamaica into the United States was more pronounced.

Dub reggae also fundamentally altered the British music scene beginning in the 1970s—yet another cultural flow within the Black Atlantic. "We have a huge West Indian community," says DJ Vadim, speaking of the Caribbean immigrants who settled in London, where he now lives. During the 1970s, reggae influenced musicians working in other genres; take, for instance, Eric Clapton's cover of Bob Marley's "I Shot the Sheriff" or the Clash's punk-reggae fusions. In England, a prominent sound-system culture was imported from Jamaica, where

DJs toasted over reggae instrumentals in outdoor parties. "I'm not saying England invented hip-hop," says DJ Vadim, "but I'm saying it came across to England very easily. We have such a huge black music scene in London, it's such a cosmopolitan city."

THE HIP-HOP DJ AND THE ORIGINS OF DIGITAL SAMPLING

By ignoring the rules, hip-hop artists came up with a whole new way of thinking about music.—DJ SPOOKY

In the early days of hip-hop a few important DJs had large followings in each of their districts throughout the South Bronx. The Jamaican immigrant DJ Kool Herc was the most popular of these early hip-hop DJs in the 1970s. He is credited with developing and elaborating upon two new musical methods that others would emulate.⁴² Herc isolated the percussive breaks (known as breakbeats) that were popular with dancers, and he mixed them into one long musical collage. "Essentially what they were all doing is they were beat miners," Greg Tate tells us. "They were mining old records for those break sections."

T La Rock, a DJ and MC who lived in the South Bronx during the 1970s, explains to us that breakbeats are "the really funky part of the record. It was isolated in the middle of the whole song, and we would look for that one particular part in the record." He says that they would buy two copies of the same record, and then mix the two records back and forth. "Once the breakbeat ended, we used what's called a cross fader on the mixer to bring in the same beat," T La Rock says in explaining how DJs would use their electronic gear to go back and forth between the music on two turntables. "That's how we extended the breakbeats and made a longer piece." He tells us that these hip-hop DJ events happened at local parties they threw in the streets and parks, as well as in community centers. "Just picture an apartment building with a community center on the first floor, in the back where the kids would go and hang out," he says. "We would play in places like that, and also apartments. Sometimes it would be somebody's birthday party or something like that, and other times it would just be an empty apartment."

There was another creative practice that complemented the DJ's method of cutting up music: the "pause tape." T La Rock says that be-

fore he and his friends got their hands on two turntables and a mixer, they would use a cassette deck with a pause button to string breakbeats together. "Once that breakbeat plays, we would stop it, pause it, bring the needle back to the beginning of that breakbeat, pause it, and then release the pause so that the breakbeat would keep playing." Whether it was cassette decks, turntables, or—later—digital samplers, hip-hop artists made their electronic equipment do things for which the equipment was not originally intended, opening up new creative possibilities in the process.

Even if they were not formally trained on a traditional instrument, the best of the early hip-hop artists knew a lot about music. DJ Kool Herc, for instance, had an encyclopedic knowledge of breakbeats as well as a music collection and booming sound system to match. He tells us, "I quickly realized that those breakbeats were making the crowd go crazy. So I just started digging deeper and deeper into my record collection, ya know? As long as I kept the beat going with the best parts of those records, everybody would keep dancing. And the culture just evolved from that." As a very complicated form of musicianship, DJ-ing requires a great amount of dexterity. Harry Allen reminds us that DJs work within a very small amount of space on a vinyl record, which means that they can't be off by millimeters: "We're talking about very tiny distances on a record," he emphasizes.

As MC Eyedea, one half of the duo Eyedea & Abilities, observes, "The turntable is the newest instrument. Turntables are more rhythmically complex than any other instrument, based on the fact that what you can do with a fader and your hand playing at the same time." Other DJs who built on Kool Herc's innovations began expanding the possibilities that two turntables could offer—particularly Grandmaster Flash, who went even further than Kool Herc in his turntable wizardry.⁴³ Starting in 1974, Flash attended every Kool Herc party he could, and he carefully observed Herc to try to figure out what the master DJ was doing right, and wrong. "It hit me," Flash remembers, "whatever Herc was doing, he wasn't doing it on time. One song dropped out, but it wasn't on the right beat with the next one. He would pick up the needle and drop it on the vinyl—first on one turntable and then on the next—taking a chance that he would land on the break."⁴⁴

Flash understood the dancers' need for the beat to stay on time, and so he figured out how to apply his engineering and electronics skills

to fix this problem. "A simple toggle switch let me hear what was on each turntable," said Flash. "At school, we called it a SPDT—single pole, double throw—switch. I didn't have one on my mixer, so I took some crazy glue and glued one on." This allowed Flash to, as he put it at the time, "lock these beats up and keep the shit going!"⁴⁵ But in order to keep the beats flowing, they needed records.

The hip-hop DJs of the South Bronx scored their beats from a variety of obscure sources, including a small specialty store in New York City named Downtown Records. Located in the Forty-Second Street and Sixth Avenue subway station, it had "a million records in a million different places," as Grandmaster Flash put it.⁴⁶ He remembers there were records in the bins, racks, stacks, shelves, counters, walls, ceiling, and in boxes and crates: modern jazz, sound effects records, oldies, and more. "Everywhere I turned, there was something cool I couldn't get in the Bronx—white boy music like the Steve Miller Band and Spooky Tooth, Jeff Beck and Steely Dan . . . talk about righteous beats! Crazy beats from the Philippines and India with sounds I didn't know a human being could make."⁴⁷

Another legendary DJ who frequented that store was Afrika Bambaataa. "If you've ever had the fortune to see Afrika Bambaataa mix," says Greg Tate, you'll see "the way he can move between bits and pieces of records and create these incredible medleys in a short period of time." Grandmaster Flash marvels at the depth of Bambaataa's record collection and musical knowledge. During parties on the Bronx's East Side, Bambaataa would throw on the *Pink Panther* theme song, but with a drum beat underneath, and he could get the crowd moving to the Rolling Stones, Aerosmith, the Beatles, Grand Funk Railroad, Led Zeppelin, and even the Monkees. As Flash recalls, "Then he'd play five songs in a row that would have you scratching your head, saying: 'Who the hell was that?'"⁴⁸

Tom Silverman, who would go on to release Afrika Bambaataa's "Planet Rock" and dozens of other hip-hop classics on his label Tommy Boy Records, recalls the first night he saw Bambaataa rock the crowd:

I heard about Afrika Bambaataa in 1979 through a record store, Downtown Records, which was down in the subway station in Times Square. I used to go there because they had a great doo-wop section, a great oldies collection, and they had opened a new room called "the breakbeat room." It was a tiny

room and there was a record player, and a young guy named Roy would play records there for the kids that would come in. They were great records like "Scorpio" by Dennis Coffee, or the Eagles' "The Long Run." There were all different kinds of records—some were rock records and some were pop records and some of them were R&B and funk records. Kids would come in, two or three at a time, and they'd chip in and they'd buy a bunch of records. And they were *expensive*. And these kids were coming in from the Bronx and chipping in all their money together to buy records as a team so they could share the records. I asked them, "How do you know about these records and why are you buying them?" They said, "Because we DJ." They said, "There's this guy in the Bronx whose name is Afrika Bambaataa."

So I asked around, and Bambaataa used to buy records there too. Roy and some other people told me about him and that he DJ-ed a certain night of the week at this club called the T-Connection on White Plains Road. So I went up to hear him in the Bronx. . . . There was a stairway against the wall that went up to a balcony, and up on the balcony was Afrika Bambaataa with his DJ setup. On one side of him was Jazzy Jay and on the other side was DJ Red Alert, and they were handing him records he would ask for. I went closer and said hello to him and watched what he was doing. I was looking at the records, and half of them had the label steamed off so you couldn't see what they were—or they had tape over them—and some of them had little pin marks in different places on the record so they knew where to put the needle down. He played "Big Beat" by Billy Squire, which is sort of a big arena rock guy, and Kraftwerk, which was kind of electronic new wave. And to hear that in the Bronx in front of an all-black young crowd was very surprising; it was mind blowing to hear and see these kids totally appreciating every kind of music. Then Bambaataa cut in "Mary Mary" by the Monkees, and I said, "Wow, is there anything this guy won't play?"

The working methods of DJs like Afrika Bambaataa illustrate the analogous relationship between selector and composer, between turntablist and instrumentalist. The legal scholar Imani Perry argues that this practice produces what can be thought of as a metacomposition, one that stretches across the course of an evening.⁴⁹ "To Herc, a DJ set was one continuous piece of music," Grandmaster Flash observes in his autobiography. "My man was composing something. And if he was a composer, that went for me too. I went home and reexamined my records; how did Bob James connect to James Brown? Would Mongo

Santamaria work with the Meters? I'd hear a piece of one song and a piece of another and would imagine the two pieces playing over each other. Or one right after another—*on time*."⁵⁰ Disco DJs obsessed about the same things.

DISCO AND THE RISE OF THE REMIX

A lot of disco remixes were mash-ups, right?—DREW DANIEL

As in hip-hop, being a good disco DJ hinged on how smoothly and creatively one could segue from one song to another. With two turntables and a mixer, the early disco DJ Francis Grasso of The Sanctuary would blend the beats together, allowing the music to flow from song to song, forming a larger whole. That whole formed a dynamic relationship between the DJ, the crowd, and the music.⁵¹ Other pioneering disco DJs like David Mancuso, who presided over The Loft, shared similarly eclectic tastes with hip-hop DJs like Afrika Bambaataa, DJ Kool Herc, and Grandmaster Flash. Mancuso approached music with open ears, mixing together disparate genres with only one thought in mind: Will the song make people dance? He threw into this musical stew Rare Earth (Motown's first white act), the soulfully psychedelic music of the Temptations (from their late-1960s and early-1970s period), War (and other Latin-influenced acts), and the polyrhythmic Afro-pop of Olatunji.⁵²

Francis Grasso probably had more of an impact on disco and the art of mixing than anyone else. He viewed songs not as self-contained entities but as parts of a blended, nightlong set—an experience that links the DJ, the dancers, and the music together within a space and across time. He pioneered beat matching—the act of synchronizing the tempos of two different songs to create a seamless mix from one song to the other.⁵³ By today's standards, or even the standards of the late 1970s, the early disco DJs had only primitive equipment at their disposal. When disco was in its prime, computers were large machines that filled whole rooms in office buildings; they were not designed to edit music. The DJs mixed the music live, manually—with two turntables, a mixer, and some imagination. There were no pitch controls on the turntables to allow DJs to bend tempos and create transitions from one song to another. So Grasso had to invent creative workarounds, such as manually slowing a record's speed with his finger.⁵⁴

One way Grasso transformed dance music was by using two copies of the same record to seamlessly switch back and forth between the same song—moving from one section to another without missing a beat. Another technique that Grasso introduced to the dance club world, one that is still used by hip-hop DJs today, is the “slip cue.” Typically, a mat sits between the rotating turntable and the record itself, allowing the DJ to manually hold the record stationary as the turntable rotates beneath it. That way, a DJ can release a record at a precise time, on an exact beat.⁵⁵ Some disco DJs also used reel-to-reel tapes to “edit” or reconstruct songs—kind of like the hip-hop pause tapes created by T La Rock and others in the South Bronx during this era. On tape they pre-recorded cross fades, segues, and mixes to supplement what they did on the turntables but in ways that would be impossible to pull off live.

As with dub reggae pioneers such as King Tubby or Lee “Scratch” Perry, early disco DJs were among the first to popularize the notion that there was nothing permanent or fixed about an original recording.⁵⁶ Of course, recording studio engineers had previously mixed and remixed songs, but the key difference was that consumers—not elite engineers hired by a band or record company—could now participate in reworking a song. By the late 1970s, the standard dance music tropes of extended mixes—elongated introductions, fade-outs, and instrumental or percussive breaks—made their way from the disco DJ booth to record stores in the form of twelve-inch singles. The difference between twelve-inch singles and the traditional seven-inch ones—which had dominated the singles market for the previous thirty years—wasn’t simply in the amount of music each format held. Indeed, the twelve-inch single also embodied a very different philosophy about how music could be consumed.

Music released on seven-inch singles was typically composed and recorded for the needs of commercial radio, which meant that a song had to be short enough for radio program directors to fit in many songs per hour. The twelve-inch single format—with its extended percussion breaks, dynamic shifts in melodies, and wider grooves that could make the bass go boom—is tailored for dancers who want to be pushed to the limits of exhaustion and euphoria.⁵⁷ “Take a record like [Dennis Coffey’s] ‘Scorpio,’ which had this fantastic drum beat,” says The Loft’s David Mancuso. “We’d always mix it back and forth, take a really good break, and make it longer. That’s where a twelve-inch came into play. The re-

cord companies could take a record and extend it and give the people what they wanted.”⁵⁸ Twelve-inch singles steadily gained in popularity throughout the 1970s, especially after Tavares released its crossover hit “Heaven Must Be Missing an Angel” on this format. Many others followed, like the Walter Gibbons–remixed version of Double Exposure’s “Ten Percent,” which reworked the original three-minute version into a nine-minute mix filled with percussive beats and long instrumental passages. This formula became a staple of the twelve-inch format.

Tom Moulton was another remix innovator who helped change the complexion of pop music. Even though Moulton wasn’t a DJ, he was nevertheless familiar with what went down in dance clubs, because he was a regular at discos on Fire Island and in New York City. There, he paid attention to what made the dancers go crazy, what bored them, and what gave the denizens of the dance floor a much-deserved break. He deconstructed songs by boosting the hooks, lengthening instrumental passages, building layers of rhythms that beefed up the percussion breaks, and other tricks. Moulton made his first major mark on the music industry when he remixed three relatively short songs into a lengthy medley of Gloria Gaynor’s first album, *Never Can Say Goodbye*. The mix spanned the entirety of side two. Moulton dropped another musical bomb when he reworked a legendary disco-funk track by the B.T. Express, “Do It (Til You’re Satisfied),” by extending the song from its original three-minute running time to a six-minute jam.

Moulton combined the instincts of a music fan with the sophistication of a studio engineer. On his remix of Dan Hartman’s “Instant Replay,” for instance, he added sonic flourishes like whirring background sound effects, treated vocals, the inevitable percussive build to a climax, and an unforgettable instrumental break section. He brought out the best in the original recording by, for instance, using the drum breaks as a structuring transition from one section to the other. And Moulton’s remix of Andrea True Connection’s “More, More, More” is the man at his personal best. Midway through the song, he dropped the vocals and virtually all the instruments out of the mix, leaving just percussion, bass, and piano. For those seven seconds, we hear an electrifying break, one that was sampled, looped, and used as the foundation of the Canadian pop group Len’s hit from 2000, “Steal My Sunshine.” Arguably the most compelling part of “More, More, More” wasn’t part of the song as it was originally recorded—it came instead from Moulton’s remix.

FROM ANALOG TURNTABLES TO DIGITAL SAMPLERS

Not only were [samplers] expensive, but they were limited in what they could do—they could only sample two seconds at a time.—CHUCK D

Given hip-hop's collage-heavy roots, it is fitting that the first recorded rap song—the Sugarhill Gang's hit from 1979, "Rapper's Delight"—borrowed heavily from a disco song that was popular that summer. As hip-hop shifted from a live medium to a recorded one, "Rapper's Delight" significantly influenced and altered the way hip-hop sounded. Before its release, hip-hop music was made by DJs spinning and manipulating records while the MC spit rhymes. For their hit song, the Sugarhill Gang used a studio band that replayed the basic instrumental track from Chic's disco hit, "Good Times." It technically wasn't a sample of the original sound recording, for "Rapper's Delight" features what would later be called a "replay." Nevertheless, it provoked a lawsuit against the Sugarhill Gang—something that underscores how copyright conflicts have been embedded in the DNA of hip-hop since the very beginning of its recorded existence.

For about four years, "Rapper's Delight" provided the blueprint for how to make a hip-hop record.⁵⁹ With the exception of "Adventures of Grandmaster Flash on the Wheels of Steel"—which exclusively used records as its source material—the live, funk-band sound dominated. This fundamentally changed when Run-DMC put out their debut single in 1982. This hip-hop group stripped down the music to simple drum-machine beats, sparse keyboard embellishments, bass lines, scratch sounds, and the occasional live rock guitar. In doing so, they changed the way recorded hip-hop music was produced. Additionally, Run-DMC was among the first groups to overtly use a DJ on a hip-hop record. If you listen closely to their song "Peter Piper," you can hear the pops and crackles of a vinyl record, which was unheard of before hip-hop rewrote the rules of popular music.⁶⁰ Run-DMC effectively pushed hip-hop into its next evolutionary stage, where the act of cutting preexisting records into a new recording was embraced, and made transparent. It was the next step toward the era of digital sampling.

"What happened at that time was that a bunch of things collided, which together changed pop music," says Coldcut's Matt Black. "The invention of house music was one of those things. The idea that DJs

could make records was another thing. And, the advent of cheap technology like sequencers and samplers was probably the single most significant factor." Still, Black notes that samplers were quite expensive in the early 1980s, and only well-off musicians could afford them. As Public Enemy's Hank Shocklee recalls, "I think at the time the only thing that could capture a sample or a recording was in a keyboard called the Synclavier, and that was a \$300,000 machine. The only way you could get access to one was in professional recording studios." Soon, however, those prices dropped. Harry Allen reported in 1988 that the Akai S-900 cost \$2,500, and the sampling drum machine the Emu SP1200—which is to hip-hop producers what the Fender guitar is to rock bands—went for about \$3,000.⁶¹

The Wu-Tang Clan's production mastermind RZA remembers that, by 1988, hip-hop producers were increasingly using samplers, "but as usual," he remembers, "I couldn't afford one."⁶² Although \$3,000 is much less than \$300,000, it was still far out of reach for many aspiring hip-hop producers. In the late 1980s RZA obtained his first sampler—a department-store machine made by Casio, the first model the company put on the market. Speaking to the limitations of the technology at the time, RZA explains that the machine could only store two seconds of sound. To bypass this, he would increase the turntable speed so he could import more musical information into those two seconds, and then slow the playback as much as possible. This degraded the quality of sampled recording but it gave RZA and other producers more time to play with—and it also created a certain "dirty" digital sound that appealed to hip-hop fans and artists at the time, and continues to do so today. "I had a few neighborhood hits like that," RZA recalls.⁶³

The Casio SK-1, the mass-market sampler RZA used back in the day, was featured in 1986 on an episode of *The Cosby Show* (on which Stevie Wonder was a guest). "Bill Cosby really jump-started hip-hop culture," half-jokes the Roots' Questlove. "That one *Cosby* episode, every well-known producer I know, that's the event that changed their lives, but everybody is just ashamed to say it. That was the first time America got to see a sampler."⁶⁴

Hip-hop artists radically rewired the way that we understand how music can be made, a fact that the hip-hop activist and journalist Harry Allen recognized early on. In 1988, Allen, who is often referred to as Public Enemy's Media Assassin, wrote a prescient piece in the *Village*

Voice titled “Hip-Hop Hi-Tech.” In this essay Allen argues that hip-hop is, intrinsically, electronic African American music that speaks to a “particularly modern comfort with, and access to, electronic technology.” Discussing the emergence of digital samplers and drum machines in the 1980s, Chuck D tells us that hip-hop artists used these new machines in ways the manufacturers didn’t necessarily anticipate. This is a point echoed by Harry Allen when he notes that “hip-hop humanizes technology and makes it tactile. In hip-hop, you make the technology do stuff that it isn’t supposed to do.”⁶⁵ This can only be achieved with technological know-how, a fact that is echoed in a comment from Wu-Tang’s RZA, who remarks, “In hip-hop, you must master the technology.”⁶⁶

Allen notes that it is fitting that Joseph Saddler—better known as Grandmaster Flash—did not attend a traditional music school to learn his craft. Instead, he went to Samuel Gompers Vocational School to become an electronics technician. “I wasn’t interested in the actual making of music,” Grandmaster Flash recalls. “Beats and grooves were cool, but I wasn’t one of those guys who picked up an instrument and instantly knew what to do. But electronics were different. Electronics drew me in.”⁶⁷ Flash’s comments about making music with an electrical engineer’s perspective resonate with something Public Enemy’s Hank Shocklee said in 1988, quoted in Allen’s *Village Voice* essay: “Who said that musicians are the only ones that can make music?”⁶⁸ For many traditional musicians at the time, that statement amounted to heresy.

TECHNOLOGY CHALLENGES PREVIOUS CONCEPTIONS OF CREATIVITY

Sampling is like the color red. It’s like saying,
“Is the color red creative?” Well, it is when you use it creatively.
It’s not when it’s just sitting there.—HARRY ALLEN

When digital samplers first emerged in the 1980s, detractors referred to sampling as “groove robbing” and argued that it was a form of aural plagiarism,⁶⁹ or that it was just plain “stealing.”⁷⁰ As one entertainment lawyer diplomatically said at the time, “It may be flattering to have the underlying works used for sampling purposes, but it’s still taking.” Another lawyer representing an artist who had been sampled stated that it “is a euphemism in the music industry for what anyone else would call

pickpocketing.”⁷¹ In addition to the “stealing” allegations, some in the industry threw around a term that packed an even heavier rhetorical punch—namely that sampling was “uncreative.” For example, Mark Volman, a member of the rock band from the 1960s named the Turtles (who famously sued De La Soul for sampling his group)—bluntly said, “Sampling is just a longer term for theft . . . Anybody who can honestly say sampling is some sort of creativity has never done anything creative.”⁷²

The recording artist T. S. Monk, son of the jazz legend Thelonious Monk, emphasizes the amount of work that goes into recording a track that would have an appeal for sampling artists: “We must remember that we are talking about intellectual property when we talk about sampling.” He continues by stating:

I’m a musician, I made R&B hit records in the late seventies and eighties. I did four-month lock-outs at [the recording studio] Hit Factory. What were we doing? We were going over an eight-bar phrase and saying, “Damn should this be on an upbeat? Should it be on a downbeat? Is the bass a little loud, should it come down?” And working and working. So that little eight-bar phrase might have been the result of three or four or five days—or if you talk of a group like Steely Dan, eight or ten months work. I’m talking *work*. I’m talking getting up and going to the studio at 10 o’clock and sitting back and listening to that, and play it again. And take twenty-seven, and take eighty-five, and play it again and mix it. Work, work, work.

Tom Silverman, the founder and CEO of Tommy Boy Records, recalls that during the 1980s “a lot of musicians were really pissed off about sampling. Bob James is another one who didn’t like to be sampled, *ever*.” In the late 1980s there was no shortage of traditional musicians who were disturbed by this new musical trend. As the entertainment lawyer Anthony Berman, who was working in the music industry when sampling emerged, remembers, “The view on the traditional side was that sampling is a very lazy way of making music, of songwriting.” The engineer Bob Power, who recorded many classic hip-hop albums, recalls that a lot of engineers at the time believed hip-hop simply wasn’t music. “I have to say, honestly, I think that there was an unconscious element of racism,” Powers says. The technical recording community was a white-boys club then and, to a great extent, still is now. “At the time, I think that a lot of the engineers didn’t want to get with what was coming through the door.”⁷³

These “traditional” musicians, engineers, and other industry figures thought these young upstarts were essentially cheating and not putting any creativity into their music. As Digital Underground’s Shock G—whose MTV hit “The Humpty Dance” sampled George Clinton’s legendary funk group Parliament-Funkadelic—remembers, “As far as sampling is concerned, a lot of musicians and artists from the past generation thought that our generation wasn’t doing enough work.” Speaking sympathetically from the perspective of a sampled drummer, Harry Allen observes, “Knowing how long he took to work on that drumbeat, to get that drumbeat to where it was, and you’re just going to go—*bink*—and just take it right off the record? It almost seemed rude.”

The funk artist Mtume attacked sampling for these very reasons during the 1980s. He referred to it as “Memorex music,” invoking both the cassette tape brand and also the specter of a lazy new generation of artists who simply hit the *record* button to make their music. This criticism from Mtume and other older artists prompted the hip-hop group Stetsasonic to pen a reply in the form of their 1988 hit “Talkin’ All that Jazz.”⁷⁴

Heard you on the radio
Talkin’ ‘bout rap
Sayin’ all that crap about how we sample . . .
You criticize our method of how we make records
You said it wasn’t art, so now we’re gonna rip you apart . . .
A sample is a tactic
A portion of my method, a tool
In fact it’s only of importance when I make it a priority
And what we sample is loved by the majority
But you are a minority, in terms of thought
Narrow minded and poorly taught

Daddy-O, Stetsasonic’s MC, further explained his position on sampling when he told an interviewer that “sampling’s not a lazy man’s way. We learn a lot from sampling; it’s like school for us.”⁷⁵ Mtume and Bob James notwithstanding, not all older artists hated sampling. George Clinton tells us that he felt at the time that sampling was just a new way to make music, and he recalls that many people from earlier generations dismissed his own group as being uncreative. “My mother called us [Parliament-Funkadelic] lazy too,” Clinton says. “She said we

vamped. We just got on the groove and we just held it—held a groove for twenty minutes. She said we were lazy. [laughs] . . . Kids love it when [parents] hate it.” T. S. Monk identifies another established musician who appreciated hip-hop when it was first emerging: the legendary drummer Max Roach. “Because I’m a music educator,” Monk says, “I’ve heard a lot of people rag on the hip-hop community. But the first person to tell me, ‘You know these hip hop kids are onto something,’ was Max Roach, in 1985.”

Unease about the role of new technologies is nothing new. The sound artist Vicki Bennett observes that the history of music and technology is one full of anxiety and conflict between the old and the new. “Before people were freaking out about sampling, they were freaking about the invention of the synthesizer and how it was going to destroy orchestras,” Bennett says. “And on a similar level, much earlier, the industry was freaking out about mass duplication.” Lloyd Dunn of the Tapebeatles also puts the disruptive role of reproductive technologies in a broader historical context. “Ever since photography in the nineteenth century,” he says, “artists have had to face the notion that there are suddenly machines that are able to produce—*reproduce*—nature better than they could.” Shock G offers the following analogy: “Perhaps it’s a little easier to take a piece of music than it is to learn how to play the guitar or something. *True*, just like it’s probably easier to snap a picture with that camera [looks at camera] than it is to actually *paint* a picture. But what the photographer is to the painter is what the modern DJ and computer musician is to the instrumentalist.”

We ask T La Rock if, back in the mid-1980s, he thought about copyright issues. “Yes. That’s why I said I was hesitant using samples. Did you ever hear my *Lyrical King* [1987] album? Well, then you see there’s not that much sampling going on in that album. . . . I just didn’t want to. You know, it just kind of felt like stealing.” Nevertheless, there is at least one prominent sample on his classic “It’s Yours,” which was recorded with Jazzy Jay from Afrika Bambaataa’s crew. As T La Rock remembers, “So when Jazzy Jay came aboard, he pulls out a record [“The Champ,” a song by The Mohawks from 1968], which I had. He let that beginning go and sampled it,” says T La Rock. “I was a little reluctant to use a sample, because I really wanted everything to be live. I think you should know that. Well, we used it, so that’s a sample that was used on that record,” he shrugs.

Even though copyright wasn't on everyone's radar in the 1980s, norms about "stealing" nevertheless existed, and they shaped the creative practices of hip-hop artists. As T La Rock explains, "There's a word that was used in hip-hop and rap. It's called biting. If someone says a rhyme and this person took a piece of his rhyme, they'd say, 'You bit. You bit his rhyme.'" For instance, on Tuff Crew's song "Feel So Good" (1988), one of the group's MCs quips, "Don't try to bite this beat because it's copywritten." (Missy Elliot echoed the sentiment in her hit "Work It" (2003): "Copywritten, so don't copy me.") The Tuff Crew lyric carries a certain irony because the song and the album on which it appears—the stellar, largely forgotten *Danger Zone*—probably contain several uncleared samples. The sampled beat they are rapping over *is* copyrighted, but not by Tuff Crew. However, they still feel proprietary about the old breakbeat that they sampled because they did the work that goes into digging for old sounds.

"It was a competition, you know, who had the better beats, who had the better breakbeats," says T La Rock in discussing how it was considered bad form in the early days of hip-hop to "bite" a beat from another crew. He adds, "People would come over to you while you're DJ-ing and look over your shoulder, look at the name of the record and run out and get it." This is why Silverman remembers that Bambaataa had obscured the labels on the vinyl records he spun, and why Grandmaster Flash did the same: they were protecting themselves from shady beat biters. Thus, even in a culture based on musical borrowing, there were still norms of originality, authorship, and ownership.

The musicologist Joe Schloss, author of *Making Beats: The Art of Sample-Based Music*, explains some of the principles underlying beat mining and crate digging: "When you sample something you're also at the same time saying, 'I discovered this rare record.' It's very closely tied to ideas of record collecting." Part of the creativity of sampling is in having a deep musical knowledge not just of certain songs but also *every part* of those songs. Schloss also emphasizes the codes and ethics that underpin the acts of sampling and digging for old records. For instance, it's taboo in the hip-hop production world to sample a sound or a record that another hip-hop artist has already used, especially if it's a fairly obscure song that has been revived by, say, a well-known DJ. "This audio archeologist has discovered this rare thing that nobody's ever heard before," Schloss says, "and then you come along a week later

and are going, 'Look, I discovered it also.' Nobody is going to care about that as much."

POP EATS ITSELF

I'm sure we will continue doing it and from time to time get into trouble because of it, but [sampling] has always been only a part of the process of how we put our records together and not the reason for them existing.—KLF COMMUNICATIONS

Over the course of the 1980s, the cut-and-paste remix culture kick-started by hip-hop DJs from the South Bronx had spread far beyond New York City's five boroughs. The former Sex Pistols manager Malcolm McLaren dabbled in the hip-hop aesthetic with two fairly well-received twelve-inch singles released in 1983, "Buffalo Gals" and "Double Dutch." Other British artists like Coldcut and the KLF further mutated hip-hop's musical core, as did the cartoonishly subversive Pop Will Eat Itself—whose name referred to the cannibalistic tendencies that run through sample culture. However, the most unlikely outsiders to make a distinct, lasting impact on hip-hop itself were two white ad men named Douglas DiFranco and Steven Stein—Double Dee & Steinski, respectively. Together, they produced a series of twelve-inch singles in the mid-1980s now known as "The Lessons."

Steinski had been attending hip-hop shows around New York since 1981, and he turned Double Dee onto the scene as well. "We had been going to the Roxy quite a bit," Steinski says, "and we understood what a hip-hop remix could be. We were seeing the cream of the hip-hop DJs in the world every weekend—Red Alert, Afrika Bambaataa, Jazzy Jay, DST, just to name four off the top of my head." Double Dee & Steinski started their collaboration in 1983 when Tommy Boy Records held a promotional contest that challenged the entrants to remix the recently released single "Play That Beat, Mr. D.J." by G.L.O.B.E. and Whiz Kid. The grand prize consisted of a Tommy Boy Records shirt, Tommy Boy's back catalogue, and \$100. At the time, Stein was working as an advertising-copy supervisor at the firm Doyle Dane Bernbach, and DiFranco worked in a commercial recording studio that produced radio ads, which gave him an extensive knowledge of audio editing techniques.

"One of Douglas's producer friends read in *Billboard* about Tommy's contest and suggested that he and I enter it," Steinski says. They hauled a bunch of records and other sound sources into the studio, and finished their collage in a weekend. Instead of simply remixing the original, Double Dee & Steinski pulled the song apart and put it back together, adding several elements not in the original. Their contest entry was called "The Payoff Mix," which retroactively became known as "Lesson 1." It included spoken-word recordings, a Little Richard song, dialogue from movies, and even voices from the National Aeronautics and Space Administration—as well as snippets of contemporary hits, including Culture Club's "I'll Tumble 4 Ya" and Herbie Hancock's "Rockit," among other recordings. "Douglas would listen to something and he'd go, 'Oh, okay, we need to edit that down and slow it down a bit, and add an extra beat here,'" Steinski remembers. "Douglas was the expert, expert, expert. What I added was ideas and thoughts, along with his ideas and thoughts."

The dance and hip-hop music legends Jellybean Benitez, Arthur Baker, and Afrika Bambaataa served as contest judges, and were supplied with pizza and beer for their efforts. "Lesson 1" was the clear and obvious winner, and the judges reportedly burst into applause at the song's conclusion. "It was great," says Tommy Boy CEO Tom Silverman, "but they ended up creating a record that would never be legally released." His company's attorney was sure it would provoke a lawsuit, "So we released it to radio stations promo only," Silverman says, telling us that they only serviced it to radio stations, not record stores.

"Lesson 1" became one of the first "illegal" radio hits, though for radio stations playing the song it might not have been illegal, despite the ridiculous number of unauthorized samples they used. Silverman explains that the "blanket license" that radio stations must purchase—in exchange for the right to play whatever songs they want, without restriction—allows for radio DJs to play medleys, song excerpts used for bumper music, and other such uses.⁷⁶ Because of that technicality, Double Dee & Steinski's collage record went into heavy rotation on radio stations throughout the country, particularly on the East Coast. "Tommy Boy felt that there must be a way to capitalize on this, so it was like, 'Let's clear them,'" Steinski remembers. "So we came up with a list of everything we had used and their poor lawyer [Ricky Ducker], god rest his soul, tried to clear it. A week and a half later, he looked like

somebody beat him up, and he came in and put the paper down with one check mark, a lot of question marks, and a bunch of X's. And he was like, 'It ain't never gonna happen.'"

Within a couple years, Double Dee and Steinski completed a trilogy of "Lessons," the third of which was called "The History of Hip-Hop" and was based around Herman Kelly's "Dance to the Drummer's Beat"—a breakbeat staple for early hip-hop DJs. "It was for a project, and it was to accompany a book about Hip Hop," Steinski says. "When we finished, someone woke up and went, 'Hey! Maybe we should find out about clearing that song, 'Dance to the Drummer's Beat.' Herman Kelly—who was the owner, still is, of the copyright and the composer of the song said—'Gosh you should've spoken to me earlier.' I think he wanted like a billion dollars or something. That never came out as intended either."

"The Lessons," as they came to be known, were underground hits, not only in the United States but across the Atlantic Ocean. As Silverman remembers, the series "created a lot of noise, and it also established them internationally." And Matt Black notes that "Double Dee & Steinski's records—Lessons 1, 2, and 3—were so important in kicking off the sampling revolution." The British-based, Russian-born DJ Vadim adds, "People were sampling before that, but Coldcut and Double Dee & Steinski changed everything. Those records would take rock and roll records, pop records, funk, reggae, rock, heavy metal, classical, Indian, world music, and then blend them together. . . . So, in five minutes, and you could hear sixty tracks."

Steinski grew up listening to the Buchanan and Goodman cut-in records, which also mixed spoken word with snatches of popular songs. "I remember hearing it when I was a kid," Steinski tells us, "and it did make a big impression on me because it was like, 'Man, this is crazy. What is this? It's a combination of a radio broadcast and music, and it's funny. What is this?' But as time went on, I was listening to all kinds of shit—you know, Talking Heads, Laurie Anderson, Karlheinz Stockhausen—as well as comedy records and religious records and all kinds of other things." After amicably parting ways with Double Dee, Steinski continued to make records, most notably "The Motorcade Sped On," credited to Steinski & Mass Media (in this case, "Mass Media" isn't a stage name but rather a tongue-in-cheek reference to the mass media, with which Steinski collaborated).

"Motorcade" remixed television and radio broadcasts of the John F. Kennedy assassination, throwing in snatches of JFK speeches—including his "I am a Berliner" speech—and the song is introduced by Ed McMahon trumpeting, "Heeeeeere's Johnny," from *The Tonight Show with Johnny Carson*. Steinski says that he found a lot of that source material on vinyl—there's a whole subgenre of JFK-assassination LPs—which he pulled from his collection. It was an influential record, particularly in Britain. The *New Musical Express*, which is sort of like the British *Rolling Stone*, pressed up the "Motorcade" record as a flexidisc, and stapled it to the front of their magazine. "I got a big, big, big story with pictures and a huge interview," Steinski says, "and that really helped me out in England a lot. People still say, 'Oh, yeah, that's the first thing of yours I heard.'"

As Coldcut's Matt Black tells us, "I was into hip-hop, and Double Dee & Steinski's records sparked something in me that said, 'Hey, this is fucking cool. We've gotta do this with a four track.' So, that was the original inspiration." In 1987, Coldcut recorded and self-released its debut twelve-inch single, "Say Kids, What Time Is It?"—which mixed James Brown's "Funky Drummer" with a song from the Disney film *The Jungle Book*, along with a couple dozen other elements. Matt Black sent the first Coldcut single to Steinski, who remembers, "I think it came with handwritten inscription that said, 'We made this because of you.' I listened to it, and I went, 'Wow, this is great! Oh my God, that *Jungle Book* thing. That's awesome!' So yeah, I was very impressed." Another British sound artist, Scanner, remembers those early Coldcut singles fondly: "What was very important about Coldcut, and still is important, is that they brought a popular aesthetic to what could still be deemed as academic aesthetic. It's almost *musique concrète* with a beautiful breakbeat underneath it, and a cheeky melody that makes you want to dance."

Coldcut was well aware at the time that Double Dee & Steinski's records were probably illegal if sold in record stores. "Those records were never able to be legally released, and we were aware of these records," Matt Black says. "They used to say on the label, 'For Radio Use Only,' but they were not to be commercially sold." Black was also aware that his own albums had the same questionable legal status. "We just said, 'We're going to have to do it ourselves and do five hundred copies and

pretend it came from America.' We actually went through every copy with a soldering iron and burned out the matrix number which identified it as a British pressing so that we could claim that they came from the States—and thus make the pursuit of our ass more difficult."

In the mid-to-late 1980s, many mainstream British pop and rock groups embraced sampling in ways that their American peers had not. Pop Will Eat Itself (a.k.a. PWEI) was one of those bands, and by their third album they made the transition from a rock band to a group that was largely sample-based. And they took it to the extreme. For instance, *This Is the Day . . . This Is the Hour . . . This Is This!* features a head-imploding array of samples: Eric B & Rakim's "Paid in Full"; Jimi Hendrix's "Foxy Lady"; Salt 'n' Pepa's "Shake Your Thang" and "My Mike Sounds Nice"; Tears for Fears' "Shout"; Mantronix's "That's Right"; Pink Floyd's "Bike"; The Wonder Stuff's "Astley's in the Noose"; Public Enemy's "Yo! Bum Rush the Show," "Terminator X to the Edge of Panic," and "Bring the Noise"; Faith No More's "We Care a Lot"; and Love & Rockets' "Jungle Law." That album also samples from the following films: *Dirty Harry*, *Evil Dead 2*, *Robocop*, *The Deer Hunter*, *The Island of Doctor Moreau*, *Casablanca*, and *The Warriors*. It also includes samples of a Rice Krispies TV commercial, *Super Bowl XXII*, and the classic American TV series *The Twilight Zone*—just to name a few.

Released in 1989, *This Is the Day . . .* came out in the United States and in Europe on a major label, and so it is hard to believe that the record company was clueless about its content. The most amusing appropriation by PWEI was their use of the word "take" from Mel & Kim's cheesy Europop hit from the 1980s, "Respectable." The original song's refrain went "Take us or leave us," but on PWEI's song "Hit the Hi-Tech Groove" they only sampled the word "take" from the lyric and turned it into a chant: "Take! Take! Take! Take!" During "Preaching to the Perverted," PWEI's lead singer Clint Mansell sings, "So we steal, so what? / So far so good / We're Robin Hoods." The band's T-shirt featured a remixed PEPSI logo that morphed the trademark into PWEI (the phrase "Sample It, Loop It, Fuck It, Eat It" surrounded the logo). As Mansell stated in an interview from 1994, "I must admit we don't go hunting people whose samples we use because if you ask them they just tend to be awkward about it. If you don't ask they hardly ever notice you've used them."⁷⁷

However, when it came to pushing copyright law to the outer limits, no one did it with as much style and perversion as Bill Drummond and Jimmy Cauty, an anarchic British pop duo that adopted several pseudonyms: The Timelords, The Justified Ancients of Mu Mu, the JAMS, and the KLF. Between 1987 and 1992 they racked up seven Top-10 hits in the United Kingdom—even crossing over in America with the songs “3 A.M. Eternal” and “Justified and Ancient,” the latter of which went to number one in eighteen countries.⁷⁸ Those super-cheesy singles are the main reason why they are remembered in the United States, if they are remembered at all, as a novelty techno-pop act. The KLF’s brief but widespread popularity obscured their radical and hilariously subversive critique of the culture industry—like a goofy Theodore Adorno whose praxis involved a drum machine.

To this end, the KLF practiced an aggressive brand of provocation that predated both Public Enemy’s early forays into the copyright debates and Negativland’s impish copyright activism (which was prompted by lawsuit in 1991 for daring to sample and satirize the rock superstars U2). The KLF’s debut album, 1987 (*What the Fuck’s Going On?*), made extensive and provocative use of samples from the Monkees, the Beatles, Whitney Houston, and ABBA—with the album’s liner notes claiming that the sounds were liberated “from all copyright restrictions.” In this respect, the KLF were pop music’s first “illegal art” ideologues, though they were loath to be pigeonholed as mere copyright criminals. Drummond and Cauty were megastars compared to the relatively obscure sound collage collective Negativland—whose de facto spokesman Mark Hosler says, “We’ve never had a hit single, but we had a hit lawsuit!”

While the KLF are by no means *the* central characters in this narrative, they nevertheless were among the first to widely circulate self-conscious critiques of copyright, authorship, and ownership to a broad audience. “They knew what they were doing,” says the British sound artist Scanner. “They came from an art-school upbringing and followed what in the sixties one would call *détournement*—where you’d be sort of turning things back on themselves. And that’s what the Dada artists did as well.” Even though they embraced the pop aesthetic, the KLF could also make an unholy noise, like they did on their single from 1987 “Whitney Joins the JAMS,” in which they abducted the voice of

the pop diva Whitney Houston by forcing her to “join” their group. (Fittingly, the word *plagiarism* is derived from the Latin term for “kidnapping,” which adds an interesting dimension to the parent-child authorial metaphor.⁷⁹) “Oh Whitney, please please, *please* join the JAMS,” shouts Drummond over the *Mission: Impossible* theme song, a drum machine, and various other samples—adding, “You saw our reviews, didn’t ya?” Then, after more coaxing from Drummond, a snippet of Houston’s “I Wanna Dance with Somebody” finally breaks through the cacophonous collage with a little help from their sampling machine. Drummond, in delivering the song’s punch line, exclaims, “Ahhhhh, Whitney Houston joins the JAMS!”

When the legal threats against their 1987 album began flying, KLF quickly released—almost as if the whole affair had been planned from the beginning, which it probably was—an edited version of this copyright-infringing album. The edited version of 1987 deleted or truncated all offending samples and included instructions for how consumers could re-create the original version by using old records: “If you follow the instructions below you will, after some practice, be able to simulate the sound of our original record. To do this you will need 3 wired-up record decks, a pile of selected discs, one t.v. set and a video machine loaded with a cassette of edited highlights of last weeks ‘Top of the Pops.’”⁸⁰ Today, with home computers making cheap editing technologies widely available, it is possible to follow their instructions fairly easily. But in the 1980s it wasn’t a feasible option, which only made the joke funnier.

The critical elements of the KLF’s aesthetic brings us full circle to sampling’s roots in the avant-garde. But the KLF also made internationally popular music, and as such provides just one of many possible examples that sampling isn’t an elitist (or ghettoized) technique. Thus, conceptual art and pop culture coexist in sample-based works (shades of Andy Warhol). Sampling stands alongside allusion, quotation, and reinterpretation as part of the modern musician’s toolkit for responding to and building upon previous musicians’ work. As a technique, sampling reflects the ingenious innovations of musicians across geography (especially the Black Atlantic) and genres (especially classical, jazz, hip-hop, electronic, and dance). We have recounted many reasons why copyright law and the music industry cannot implicitly dismiss sampling

as “uncreative.” This chapter’s largely cultural and aesthetic account of sampling provides a foundation for the rest of the book. With chapter 3 we shift to a discussion of the legal and business aspects of sampling and explain how various music-industry institutions fit into the issues surrounding sampling’s rise.

3

THE COMPETING INTERESTS IN SAMPLE LICENSING

The rich history of musical collage, of which digital sampling is a part, speaks to the value and pervasiveness of musical borrowing (or appropriation, if you prefer). But, as we suggested in the introduction, sampling has sparked a great deal of legal controversy. While sampling should be understood as an art form, that classification does not answer the legal question of whether samples must be licensed. In this chapter we explain the competing interests that sampling implicates, and we demonstrate, based on our interviews, how absurdly complicated the arguments among these competing interests can become. Before we can explore the issue’s complexity, however, we must bring copyright law back into the picture—for it shapes the initial bargaining positions of each competing interest group and reflects the balance that society has struck over the use of copyrighted materials.

MUSIC COPYRIGHT

You have to clear the master side and the publishing side for each sampled song. The more songs you sample, the more of an administrative mess it becomes. It’s crazy.—TOM SILVERMAN

Music copyrights come in two basic kinds: musical compositions and sound recordings.¹ A musical composition copyright applies to the notes, chords, melodies, and other underlying structures of a piece of music.

mental and daring. We need a combination of initiatives to confront the ways that the law has not yet caught up with contemporary creative practices — or, for that matter, very old creative practices. Sampling is but one incarnation of the sorts of social exchanges that are defining the experience of being human in the twenty-first century. If we don't address the impasse between samplers and samplees, it will be to everyone's detriment that the law and the practice of everyday life will increasingly diverge.

APPENDIX I

Interviewee List

The following is a list of interviewees we spoke with who were either directly quoted in this book, or whose insights helped shape our analysis. The interviewees appear in alphabetical order by last name, except for artists who are obviously using a pseudonym; in those cases we alphabetized the names by the first letter.

ARTISTS

Steve Albini, recording engineer and musician	Drew Daniel, Matmos
Aesop Rock	DJ Abilities, Eyedea & Abilities
Big Gipp, Goodie Mob	DJ Kool Herc
Craig Baldwin, collage filmmaker	DJ Muggs, Cypress Hill
Vicki Bennett, People Like Us	DJ Qbert, Invisibl Skratch Piklz
Matt Black, Coldcut	DJ Premier, Gang Starr
David Byrne	DJ Vadim
Cappadonna, Wu-Tang Clan	Lloyd Dunn, the Tape-beatles
Cee-Lo, Gnarls Barkley and Goodie Mob	Ian Edgar, Eclectic Method
George Clinton, Parliament- Funkadelic	El-P
Chuck D, Public Enemy	Flaggs, Land of Da Lost
Wayne Coyne, Flaming Lips	Geoff Gamlen, Eclectic Method
	Bobbito Garcia
	Gregg Gillis, a.k.a. Girl Talk
	Guru, Gang Starr

Miho Hatori, Cibo Matto
 John Heck, the Tape-beatles
 Hell Razah, Sunz of Man
 Mark Hosler, Negativland
 Wyclef Jean, The Fugees
 Don Joyce, Negativland
 Kid 606
 Killah Priest, Wu-Tang Clan
 Kool Keith
 Lady Miss Kier, Deee-lite
 Tim Love
 MC Eiht
 MC Eyedea, Eyedea & Abilities
 MC Lyte
 Richard McGuire, Liquid Liquid
 Meen Green
 Method Man, Wu-Tang Clan
 Paul Miller, a.k.a. DJ Spooky
 Mix Master Mike, Invisibl Skratch
 Piklz and the Beastie Boys
 T. S. Monk
 Thurston Moore, Sonic Youth
 Mr. Dibbs
 Mr. Len
 Mr. Lif
 Lou Nutt, Land of Da Lost
 Yoko Ono
 Pam the Funkstress, The Coup
 Pasemaster Mase, De La Soul

Pete Rock
 Posdnuos, De La Soul
 Pras, The Fugees
 Prefuse 73
 Tim Quirk, Wonderlick and Too
 Much Joy
 Lee Ranaldo, Sonic Youth
 Ras Kass
 Redman
 Boots Riley, The Coup
 RJD2
 RZA, Wu-Tang Clan
 Sage Francis
 Scanner
 M. C. Schmidt, Matmos
 Shock G, Digital Underground
 Hank Shocklee, Public Enemy
 Steinski, Double Dee & Steinski
 Clyde Stubblefield, The James Brown
 Band
 T La Rock
 TradeMark Gunderson, Evolution
 Control Committee
 Trugoy, De La Soul
 Twick, graffiti artist
 Voodoo
 Saul Williams
 Jonny Wilson, Eclectic Method
 Wobbly

ENTERTAINMENT LAWYERS AND
 RECORDING INDUSTRY EXECUTIVES

Eothen Alapatt, Stones Throw Records
 Andrew Bart, entertainment lawyer
 Anthony Berman, music lawyer
 Whitney Broussard, music lawyer
 Philo Farnsworth, Illegal Art label founder
 Ken Freundlich, music lawyer

Dean Garfield, vice president of anti-piracy, Motion Picture Association of
 America
 Mia Garlick, former general counsel of Creative Commons
 Michael Hausman, music manager (Suzanne Vega, Aimee Mann)
 Kyambo "Hip Hop" Joshua, member of Kanye West management team
 Mark Kates, formerly of Grand Royal Records
 Dina LaPolt, music lawyer (clients include Tupac's estate)
 Walter McDonough, music lawyer, Future of Music Coalition cofounder and
 general counsel
 Neeru Paharia, Creative Commons
 Rick Prelinger, Prelinger Archives
 Danny Rubin, sample clearance expert
 Pat Shanahan, sample clearance expert
 Tom Silverman, CEO of Tommy Boy Records
 Bill Stafford, publisher-side clearance expert
 Brian Zisk, entrepreneur, Future of Music Coalition cofounder and technology
 director
 Shoshana Zisk, music lawyer

SCHOLARS AND JOURNALISTS

Harry Allen, hip-hop activist and media assassin
 Raquel Cepeda, journalist and hip-hop historian
 Jeff Chang, journalist and hip-hop historian
 Joanna Demers, musicologist at the University of Southern California
 Lawrence Ferrara, musicologist at New York University and sampling
 expert witness
 William W. "Terry" Fisher, Professor of Law, Harvard University
 Jane Ginsburg, Professor of Law, Columbia University
 Peter Jaszi, Professor of Law, Washington College of Law, American University
 Lawrence Lessig, Professor of Law, Harvard University
 Carrie McLaren, *Stay Free!* Magazine editor and Illegal Art Show curator
 David Sanjek, director of the Popular Music Research Centre, University
 of Salford
 Joe Schloss, ethnomusicologist at New York University
 Greg Tate, journalist and music historian
 Siva Vaidyanathan, media studies scholar at the University of Virginia

APPENDIX 2

Interview Questions

QUESTIONS FOR LAWYERS, RECORD EXECUTIVES,
AND OTHER PEOPLE WHO WEAR SUITS

General Matters

(1) In your experience in the music industry, in what ways have you encountered the sample clearance process? Which end of the licensing process have you been on?

Licensing Samples and the Sample Clearinghouses

(2) Can you briefly walk me through how musicians obtain clearance to use samples?

Probe: (2A) How has the process changed over time, specifically in response to court decisions like *Grand Upright* back in 1991 or *Bridgeport* in 2005?

(3) Who decides, and how is it decided, what samples to clear and what samples to take a chance on getting through undetected?

Probes: (3A) Does sample clearance usually happen before composing? Before recording? Before releasing the record?

(3B) How often have you seen samples get cleared after the record is released, and what problems did it cause?

(4) How does the process of licensing a sample differ between a major-label artist obtaining a clearance versus an independent artist?

(5) Many samples require at least two clearances—from the sound recording copyright holder and the musical composition copyright holder. How does the sample clearance process differ between these two types of copyrights?

Probe: (5A) How often are each of those copyrights themselves divided among multiple parties? In other words, how often are *more* than two clearances necessary for one sample?

(6) Under what circumstances would a sample clearinghouse be used?

Creative Issues

(7) Do you believe that the establishment of the sample licensing process has affected the way artists and producers use samples, especially when you compare it to the late 1980s?

Probe: (7A) Have those changes been positive, negative, some of both, or neutral, in your view, with respect to the quality or integrity of the music?

(8) Has an artist you've worked with ever substituted one sample for another—or changed a composition or recording in another way—because of the expense or difficulty of licensing a sample?

(9) Do you think tighter restrictions on sampling ever led an artist you've worked with to: (i) hire session musicians to do "replays," (ii) make different kinds of works, perhaps different styles or genres, (iii) not release certain songs or albums, (iv) release certain songs or albums noncommercially, e.g. for free Internet download or file sharing, (v) refocus his or her activities away from composing and recording toward touring or other things?

Business Issues

(10) What costs are involved with the current sample clearance system?

Probes: (10A) What types of transaction costs are involved, such as sample clearance fees, lawyers' or record executives' time?

(10B) What business costs are associated with sample clearance, such as those associated with increased studio time or delaying the release of an album while waiting for a clearance to come through?

(10C) What percentage of the album budget would you estimate goes to sample licensing costs?

(11) Do the licensing fees from samples provide meaningful income to record companies and publishers?

Probe: (11A) If not, what do record companies and publishers gain from the current sample clearance system?

Copyright Law

(12) With respect to samples, does copyright law strike the right balance between circulation and compensation?

(13) What about the role of fair use?

Probes: (13A) Have you ever worked with an artist who sampled without permission under the belief that they were making fair use of copyrighted material?

(13B) Should more artists take advantage of fair use?

(13C) Example?

(14) If sampling were made automatically permissible, without the need to acquire a license, do you think artists would sample more, less, or just as often as they do now?

Probe: (14A) Do you think the fact that sampling without permission is illegal, and therefore transgressive, makes it more attractive to musicians?

(15) There are two extreme myths about how sampling fees impact the sampled artists. Some people have said George Clinton received more money in the 1990s from licensing than any other period in his career, and others say that artists almost never see money because of bad record contracts. Where does the truth lie between these two myths?

Probe: (15A) Can you think of any examples?

(16) Originally, copyright protected entire works, and the protection for pieces of those works was more ambiguous. Now, Congress and the courts have made it clear that samples are protected. What is the rationale for putting samples under copyright?

Probes: (16A) Do you think protecting samples under copyright is justified or necessary?

(16B) Does copyright protect samples from a musician's work to protect a meaningful income stream from licensing fees? Is that a good reason?

(16C) Or does copyright protect samples because musicians have a right to protect the integrity of their work—to prevent it from being altered or put in a context they don't approve of? Is that a good reason?

Litigation

(17) Sometimes, during litigation, ProTools or other similar software files are subpoenaed. If someone took a sample and their ProTools files were opened, would it be possible to prove that the sample was taken from a particular record?

Probe: (17A) What technology is available to compare samples to the original recording where they might have come from?

Policy Solutions

(18) Does the sample clearance system need to become more efficient?

Probes: (18A) What inefficiencies in the system are most troubling to you?

(18B) What perpetuates these inefficiencies?

(19) Are you familiar with the licenses offered by Creative Commons? [If yes, the probes]

Probes: (19A) Do those licenses present a viable alternative for commercial musicians who are releasing music?

(19B) Do you think the artists you've worked with could create sample-based music by using only material released under a Creative Commons license?

(20) How would you improve the sample clearance system?

Probes: (20A) Should there be just one central clearinghouse for samples, so that information about the owners of copyrights and their stance on sampling were easier to obtain?

(20B) What if artists were presented with a "menu" of sampling options, with different prices for different kinds of samples, so that prices could be more standardized and known ahead of time?

(20C) Would you be interested in a "compulsory licensing" system in which, for instance, you would fill out a simple one-page form indicating the recordings you sampled, and a portion of the proceeds would be distributed to the copyright holders for those sampled recordings?

Thanks. [end interview]

QUESTIONS FOR ARTISTS AND PRODUCERS

The Art and History

(1) Do you use samples in your work? [If yes, proceed to question (2). If no, skip to question (4)]

(2) When was the first time you remember hearing a sample from one song in another song?

Probes: (2A) Can you give an example of an excellent use of a sample in someone else's record?

(2B) What is special about how that sample is used?

(3) What are your favorite examples of ways you've included samples in your work?

(4) Have other artists sampled your work?

(5) Do you approve or disapprove of how other artists have used your work in samples or quotations?

(6) Can you explain what makes one use of a sample creative and interesting to you, and another use of a sample uncreative?

(7) Why has sampling been so important to hip-hop?

Probe: (7A) Do you have any favorite artists who sample or a favorite time period for sample-based music?

Technical Questions

[If respondent answered yes to question (1), proceed to question (8). If no, skip to question (11)]

(8) What is the equipment you use and what steps do you have to go through to go from sampling an LP or CD to placing a fragment into a new song?

(9) Can you explain some techniques producers use to transform samples and make them unrecognizable?

Probes: (9A) What's the point of making a sample unrecognizable?

(9B) What do you gain by transforming a sample so much?

(9C) Do you lose anything by making a sample unrecognizable?

(10) How have your equipment and sampling technology changed over the years?

Probes: (10A) Have you encountered any technical difficulties when sampling from digital files?

(10B) Has digital rights management, or DRM, such as the DRM on iTunes files, ever prevented you from experimenting with samples from a piece of music?

(11) When you select a portion of a sound recording that you want to sample, what software programs and hardware are available that enable you to isolate one sound from the other sounds going on at the same time on that sound recording, so you can get a clean sample?

(12) Have you ever replayed records, or hired musicians to replay records? Why did you choose to do so, as opposed to sampling the sound recording?

(13) Have you ever used samples of public-domain works or samples of freely available works (like CDs of royalty-free samples) in your music?

The Law

(14) Do artists always need to get a license when they sample another artist's sound recording, or are there exceptions?

Probes: (14A) Are there exceptions like a "safe harbor" if you sample less than five seconds?

(14B) Where do you think the line is between fair use and copyright infringement for samples?

(15) What about the underlying songs, as opposed to sound recordings—are the rules different? Do artists always need to get a license when they quote another artist's song or composition without sampling the sound recording, or are there exceptions?

Probe: (15A) Are there exceptions like a "safe harbor" if you only borrow three notes from a song?

(16) Do you know any artists who have been sued for copyright infringement because of samples they did not license?

Probe: (16A) Do you know of artists who have been sued for sampling?

Licensing

(17) Do you typically obtain a license when you sample a sound recording? [If yes to question (17), proceed to question (18). If no, skip to question (19)]

(18) Do you obtain licenses for *all* the samples you use?

Probes: (17A) How do you decide which samples to clear? Does it rely on the sample's length, context, who you're sampling, or what other factors?

(17B) When do you clear the sample: (i) when composing, (ii) before recording, or (iii) before releasing the record?

[Skip to question (20)]

(19) Why do you choose not to license the samples you use?

Probes: (19A) Is licensing too expensive?

(19B) Do you feel you can rely on the doctrine of fair use in using samples, perhaps because your uses are transformative?

(19C) Do you feel you can "fly below the radar" because your recordings sell a relatively limited number of copies?

(20) Do you think the current sample licensing system encourages creativity?

Probe: (20A) Is licensing very difficult or complicated?

(21) Do you expect other artists to seek your permission or obtain a license if they want to sample your work?

Probes: (21A) Are there certain artists who you would deny the right to sample your songs? Why?

(21B) Are there certain musical or lyrical contexts in which you wouldn't want your music sampled? Why?

(22) Should artists receive compensation when their work is sampled?

Probe: (22A) Does it make a difference if it was the hook of the song as opposed to something unintelligible or heavily altered?

Chilling Effects

[If respondent answered yes to question (1), proceed to question (23). [If respondent answered no, skip to question (25)]]

(23) Does the need to license samples increase your time spent in the studio?

Probe: (23A) In what other ways does clearing samples take up your time [respondent should answer yes to all that apply]: (i) meeting with lawyers, (ii) meeting with record label, (iii) delaying the release date of recordings, or (iv) other time-consuming activities?

(24) Are there any artists you don't sample because it would either cost too much to clear or they won't give permission?

Probe: (24A) Do you or other artists you know have stories about samples that were impossible or difficult to clear?

(25) How do copyright law and the need to acquire licenses for samples affect how you make music?

Probes: (25A) Do you ever substitute one sample for another because of the expense or difficulty of licensing a sample?

(25B) Have you changed the genre or style of your work?

(26) How do copyright law and the need to acquire licenses for samples affect the way you participate in the music business?

Probe: (26A) Have you ever had to shelve or rerecord a track because of copyright clearance problems?

(26B) Have you released music noncommercially, e.g. for free Internet download?

(26C) Have you shifted time from composing and recording to touring?

(27) Has copyright law affected how you make music in any way, such as the choice of what genres you participate in, the songs you allude to or borrow from, or your decision not to make sample-based music?

Thanks. [end interview]

The Art and History of Sampling

- (1) How has sampling been so central to hip-hop music?
Probe: (1A) Do you have any favorite artists who sample or a favorite time period for sample-based music?
- (2) Can you explain what makes one use of a sample creative and interesting to you, and another use of a sample uncreative?
- (3) Can you talk about an artist or artists who are notable for their use of sampling, or is there a notable time period for sample-based music?
- (4) How is sampling different in the last few years compared to sampling in the mid to late 1980s?

Technical Questions

- (5) Can you explain some techniques producers use to transform samples and make them unrecognizable?
Probes: (6A) What is the point of making a sample unrecognizable?
 (6B) What do you gain by transforming a sample so much?
 (6C) Do you lose anything by making a sample unrecognizable?
- (6) Have you heard about artists “replaying” samples with live musicians, and can you explain why they do it?
- (7) How has sampling technology changed over the years?

The Law

- (8) Do artists always need to get a license when they sample another artist’s sound recording, or are there exceptions?
Probe: (8A) Where do you think the line is between fair use and copyright infringement for samples?
- (9) Is there a difference in the way samples are cleared (or not cleared) by artists on major labels, independent labels, or artists who self-release their music?
- (10) Do you *know* of artists who have been sued for sampling because of samples they did not license?

Chilling Effects

- (11) Do you think the current sample licensing system encourages creativity?
Probe: (11A) Is licensing very difficult or complicated?
- (12) Does the need to license samples increase time spent in the studio for artists?
Probe: (12A) In what other ways does clearing samples take up time [respondent should answer yes to all that apply]: (i) meeting with lawyers, (ii) meeting with record label, (iii) delaying the release date of recordings, or (iv) other time-consuming activities?
- (13) Are there any musicians that producers don’t try to sample because it would either cost too much to clear or they won’t give permission?
Probes: (13A) Do you know of any stories about samples that were impossible or difficult to clear?
 (13B) Do you think the rise in the use of synthesizers is at all connected to the difficulty and expense of clearing samples?
- (14) Are there any examples you can think of where copyright law and the need to acquire licenses for samples affects the way sampling artists make their music?
Probes: (14A) Do artists ever substitute one sample for another because of the expense or difficulty of licensing a sample?
 (14B) Has the licensing system changed the ways artists use samples?
- (15) Do you believe that the establishment of the sample licensing process has affected the way artists and producers use samples, especially when you compare it to the late 1980s?
Probe: (15A) Have those changes been positive, negative, some of both, or neutral, in your view, with respect to the quality or integrity of the music?
- (16) Do you think tighter restrictions on sampling ever led sampling artists to: (i) hire session musicians to do “replays,” (ii) make different kinds of works, perhaps different styles or genres, (iii) not release certain songs or albums, (iv) release certain songs or albums noncommercially, e.g. for free Internet download or file sharing?
- (17) How would you improve the sample clearance system?
Probe: (17A) Should there be just one central clearinghouse for samples, so that information about the owners of copyrights and their stance on sampling were easier to obtain?
 (17B) What if artists were presented with a “menu” of sampling options, with different prices for different kinds of samples, so that prices could be more standardized and known ahead of time?

(17C) Would you be interested in a “compulsory licensing” system in which, for instance, you would fill out a simple one-page form indicating the recordings you sampled, and a portion of the proceeds would be distributed to the copyright holders for those sampled recordings?

Thanks. [end interview]

NOTES

INTRODUCTION

1. Mark Katz, *Capturing Sound: How Technology Has Changed Music* (Los Angeles: University of California Press, 2004), 138.
2. All quotations contained in this volume that are not cited were drawn from our interviews (see appendix 1). Note that on occasion parts of the quoted interviews were lightly edited for the purposes of clarity and readability.
3. *U.S. Code* 17 (2006), § 107.
4. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994).
5. Robert Levine, “Steal This Hook? D.J. Skirts Copyright Law,” *New York Times*, August 6, 2008, <http://www.nytimes.com/>.
6. U.S. Constitution, art. I, § 8, cl. 8.
7. Joanna Demers, *Steal This Music: How Intellectual Property Law Affects Musical Creativity* (Athens: University of Georgia Press, 2006), 9.
8. For an exhaustive song-by-song examination of musical borrowing in popular music, see Timothy English’s *Sounds Like Teen Spirit: Stolen Melodies, Ripped-Off Riffs, and the Secret History of Rock and Roll*.
9. “In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.” *U.S. Code* 17 (2006), § 102(b).
10. Harold Demsetz, “Information and Efficiency: Another Viewpoint,” *Journal of Law and Economics* 12, no. 1 (1969): 1–22. Demsetz and the property-rights theorists who have followed him argue that copyrights organize investment in creativity. Granting someone a copyright arguably gives him or her

greater incentive to tend to the value of that work. To continue with the Arcade Fire example, the band invested time and money for music equipment and their unique recording space (a former church in Farnham, Quebec). See Darcy Frey, "One Very, Very Indie Band," *New York Times Magazine*, March 4, 2007, 31. Moreover, both Merge Records and the band itself spent time and money to promote *Neon Bible*. The more purchasers and listeners, the greater the social benefits from the Arcade Fire's work. Therefore, the argument goes, centralizing control over *Neon Bible*, even after its creation, by granting a copyright is socially beneficial.

11. Ronald H. Coase, "Why Economics Will Change" (lecture presented at the University of Missouri, Columbia, April 4, 2002), <http://www.coase.org/>.

12. See, for example, Arnold Plant, "The Economic Aspects of Copyright in Books," *Economica* 1, no. 2 (May 1934): 167–95; and Stephen Breyer, "The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs," *Harvard Law Review* 84, no. 2 (1970): 281–355.

13. William M. Landes and Richard A. Posner, *The Economic Structure of Intellectual Property Law* (Cambridge, Mass.: Belknap Press, 2003), 52–53.

14. Some samples do not constitute copyright infringement because of a limitation or exception enshrined in the law. We discuss such provisions in more detail below.

15. We provide a lengthier discussion of the two kinds of music copyright—musical compositions and sound recordings—in chapter 3. We often use the more colloquial terms "song," "track," or "source" as umbrella terms to refer simultaneously to both the musical composition and the sound recording. That is, we use these nonlegal terms to represent the unified whole as experienced by listeners to a piece of music. We thus restrict our usage of "musical composition" and "sound recording" to technical, legal contexts.

16. Michael Heller, *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives* (New York: Basic Books, 2008), xiii.

17. *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

18. Audio Home Recording Act of 1992, Public Law No. 102–563, U.S. Statutes at Large 106 (1992): 4237, codified at *U.S. Code* 17 (2006), §§ 1001–1010.

19. The rewards and losses may not correlate with the copyright owners' stance in the dispute. In the case of the VCR, the movie industry increased its revenues for years (thanks to movie rentals) despite losing its battle to squelch the new technology.

20. See, for example, *Newton v. Diamond*, 388 F.3d 1189 (9th Cir. 2003).

21. *U.S. Code* 17 (2006), § 115(a)(2).

22. Neil Weinstock Netanel, *Copyright's Paradox* (Oxford: Oxford University Press, 2008).

CHAPTER 1. THE GOLDEN AGE OF SAMPLING

1. Brian Coleman, *Check the Technique: Liner Notes for Hip-Hop Junkies* (New York: Villard Books, 2007), 87.

2. *Ibid.*, 152.

3. *Ibid.*, 151.

4. Dan LeRoy, *Paul's Boutique* (New York: Continuum, 2006).

5. Simpson quoted in Angus Batey, *Rhyming and Stealing: A History of the Beastie Boys* (New York: Omnibus Press, 1998), 104.

6. LeRoy, *Paul's Boutique*, 36–37.

7. Coleman, *Check the Technique*, 353.

8. Chuck D, *Lyrics of a Rap Revolutionary: Times, Rhymes and Mind of Chuck D* (Beverly Hills, Calif.: Off Da Books, 2006), 105.

9. Coleman, *Check the Technique*, 192.

10. *Ibid.*, 17.

11. Matt Diehl, "The Making of *Paul's Boutique*," *Rolling Stone*, December 11, 2003, 138.

12. Coleman, *Check the Technique*, 400.

13. See, for example, Melville Nimmer and David Nimmer, *Nimmer on Copyright*, rev. ed., vol. 4, § 13.05[G] (New Providence, N.J.: Matthew Bender, 2009), which discusses the Ninth Circuit and Seventh Circuit's endorsement of the view that downloading and uploading online constitute copyright infringement.

14. See *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005).

CHAPTER 2. LEGAL AND CULTURAL HISTORY OF SOUND COLLAGE

1. Chris Cutler, "Plunderphonics," in *Sounding Off! Music as Subversion/Resistance/Revolution*, ed. Ron Sakolsky and Fred Wei-Han Ho, 67–86 (Brooklyn, N.Y.: Autonomedia, 1995); Austin Clarkson, *Stefan Wolpe: A Brief Catalogue of Published Works* (Islington, U.K.: Sound Way Press, 1991).

2. Herbert Russcol, *The Liberation of Sound: An Introduction to Electronic Music* (Englewood Cliffs, N.J.: Prentice-Hall, 1972).

3. Cage quoted in Frances Dyson, "The Ear That Would Hear Sounds in Themselves: John Cage, 1935–1965," in *Wireless Imagination: Sound, Radio, and the Avant-Garde*, ed. Douglas Kahn and Gregory Whitehead (Cambridge, Mass.: MIT Press, 1994), 379.

4. David Revill, *The Roaring Silence: John Cage—A Life* (New York: Arcade, 1992), 43; Glenn Watkins, *Pyramids at the Louvre: Music, Culture, and Col-*

lage from Stravinsky to the Postmodernists (Cambridge, Mass.: Belknap Press, 1994).

5. Joshua Kun, "A Select History of Found Sound," *Option*, March–April 1997, 65–68; David Ewen, *Composers of Tomorrow's Music: A Non-Technical Introduction to the Musical Avant-Garde Movement* (New York: Dodd, Mead and Company, 1971).

6. Russcol, *The Liberation of Sound*.

7. Watkins, *Pyramids at the Louvre*, 406.

8. Ibid.

9. Larry Polansky, "The Early Works of James Tenney," in *The Music of James Tenney*, ed. Peter Garland, 119–294 (Santa Fe, N.M.: Soundings Press, 1984).

10. Greg Prato, "Dickie Goodman: Biography," *AllMusicGuide.com*, <http://www.allmusicguide.com/>; Chuck Miller, liner notes to *Dickie Goodman & Friends, The King of Novelty: Greatest Fables*, vol. 2, Luniverse B000Y5D5YE CD, 1998.

11. Miles, *Paul McCartney*, 484.

12. Edwin Pouncey, "Rock Concrete: Counterculture Plugs into the Academy," in *Undercurrents: The Hidden Wiring of Modern Music*, ed. Rob Young, 153–62 (London: Continuum, 2002).

13. Russcol, *The Liberation of Sound*.

14. The Tape-beatles, "The Tape-beatles Undergo Severe Trauma, Depression," *RetroFuturism*, no. 13 (July 1990): 1596–97.

15. John Oswald, "Creatigality," in *Sounding Off! Music as Subversion/Resistance/Revolution*, ed. Ron Sakolsky and Fred Wei-Han Ho, 87–90 (Brooklyn, N.Y.: Autonomedia, 1995).

16. Phil England, "That's Irritainment," *Wire*, June 2008, 22.

17. David Toop, *Ocean of Sound: Aether Talk, Ambient Sound and Imaginary Worlds* (New York: Serpent's Tail, 1995).

18. Norman Lebrecht, "Echoes Strike a Chord," *Daily Telegraph*, May 11, 1996, 7; Lewis Lockwood, *Beethoven: The Music and Life* (New York: Norton, 2003), 438.

19. Watkins, *Pyramids at the Louvre*.

20. Ibid., 400.

21. Ibid., 342.

22. Ibid., 343.

23. Malcolm MacDonald, *Brahms* (New York: Oxford University Press, 2001), 152–53.

24. Walter Ong, *Orality and Literacy* (New York: Routledge, 1982), 133.

25. Joe Klein, *Woody Guthrie: A Life* (New York: Delta Trade Paperbacks, 1980), 120.

26. Michael Chanan, *Musica Practica: The Social Practice of Western Music from Gregorian Chant to Postmodernism* (New York: Verso, 1994).

27. Joshua Kun, *Audiotopia: Music, Race, and America* (Berkeley: University of California Press, 2005), 49.

28. Ibid., 54.

29. Ibid., 55.

30. Cheryl L. Keyes, *Rap Music and Street Consciousness* (Urbana: University of Illinois Press, 2002), 21.

31. LeRoi Jones, *Blues People: Negro Music in White America* (New York: HarperCollins, 1963).

32. Mark D. Moss, "Who Owns the Songs the Whole World Sings?" *Sing Out! Folk Song Magazine* 42, no. 1 (spring 1998): 3.

33. Roger Catlin, "Blues Greats Guilty of 'Borrowing,' Too," *Chicago Sun-Times*, July 29, 1992, B41.

34. Willie Dixon, *I Am the Blues: The Willie Dixon Story*, with Don Snowden (New York: Da Capo, 1989), 90.

35. David Ritz, *The Adventures of Grandmaster Flash: My Life, My Beats* (New York: Broadway Books, 2008), 80.

36. Christopher Dunn, *Brutality Garden: Tropicália and the Emergence of a Brazilian Counterculture* (Chapel Hill: University of North Carolina Press, 2001), 178.

37. Ibid., 6.

38. Ibid., 93–94.

39. Alexander G. Weheliye, *Phonographies: Grooves in Sonic Afro-Modernity* (Durham, N.C.: Duke University Press, 2005), 21.

40. Michael E. Veal, *Dub: Soundscapes and Shattered Songs in Jamaican Reggae* (Middletown, Conn.: Wesleyan University Press, 2007), 66.

41. Ibid., 193.

42. Tricia Rose, *Black Noise: Hip-Hop Music and Black Culture in Contemporary America* (Hanover, N.H.: Wesleyan University Press, 1994).

43. Nelson George, *Hip-Hop America* (New York: Viking, 1998).

44. Ritz, *Adventures of Grandmaster Flash*, 54.

45. Steven Hager, *Hip Hop: The Illustrated History of Break Dancing, Rap Music, and Graffiti* (New York: St. Martin's Press, 1984), 36.

46. Ritz, *Adventures of Grandmaster Flash*, 66.

47. Ibid.

48. Ibid., 100.

49. Imani Perry, *Prophets of the Hood: Politics and Poetics in Hip Hop* (Durham, N.C.: Duke University Press, 2004), 71.

50. Ritz, *Adventures of Grandmaster Flash*, 74.

51. Kurt B. Reighley, *Looking for the Perfect Beat: The Art and Culture of the DJ* (New York: Pocket Books, 2000).
52. Tim Lawrence, *Love Saves the Day: A History of American Dance Music Culture, 1970–1979* (Durham, N.C.: Duke University Press, 2003).
53. Peter Shapiro, *Turn the Beat Around: The Secret History of Disco* (New York: Faber and Faber, 2005).
54. Bill Brewster and Frank Broughton, *Last Night a DJ Saved My Life: The History of the Disc Jockey* (New York: Grove Press, 2000).
55. Lawrence, *Love Saves the Day*.
56. Brewster and Broughton, *Last Night a DJ Saved My Life*.
57. *Ibid.*
58. Reighley, *Looking for the Perfect Beat*, 32.
59. "I was told a story by Rick Rubin of how he went on to produce the first song on Def Jam, T La Rock's 'It's Yours,'" says Saul Williams, referring to the cofounder of the seminal hip-hop label Def Jam which he started in 1984. It was the first song Rubin produced before he went on to work with Run-DMC, LL Cool J, and the Beastie Boys—not to mention later efforts with Johnny Cash, Tom Petty, Metallica, and the Red Hot Chili Peppers. "What happened," Williams tells us, "was he would go to clubs in New York in the late seventies and early eighties, and he'd hear DJs spinning breakbeats and people rhyiming over them. And then he'd run out and buy the latest Sugar Hill or Enjoy record label twelve-inch, and it would be the same rapper, but he'd be rapping over a bass line or some disco line, and he would always be disappointed." Rubin was used to hearing hip-hop music in the clubs and in parks, and he was annoyed because the recorded versions only featured the rappers atop rerecorded disco tracks.
60. David Toop, *Rap Attack 2: African Hip-Hop to Global Hip-Hop* (London: Serpent's Tail, 1991).
61. Harry Allen, "Hip-Hop Hi-Tech," in *Step into a World: A Global Anthology of the New Black Literature*, ed. Kevin Powell, 91–95 (New York: Wiley and Sons, 2000).
62. RZA [Robert Diggs], *The Wu-Tang Manual*, with Chris Norris (New York: Riverhead, 2005), 195.
63. *Ibid.*
64. Charles Aaron, "Questlove: The SPIN Interview," *SPIN*, June 2008, 84.
65. Allen, "Hip-Hop Hi-Tech," 91.
66. RZA, *Wu-Tang Manual*, 193.
67. Ritz, *Adventures of Grandmaster Flash*, 25.
68. Allen, "Hip-Hop Hi-Tech," 95.
69. John Henken, "Sounding Off by the Numbers: Making Music the MIDI Way," *Los Angeles Times*, October 16, 1988, Calendar, 66.

70. David Goldberg and Robert J. Bernstein, "Reflections on Sampling: A Sampler of Issues," *New York Law Journal* (January 15, 1993): 3.

71. Stan Soocher, "License to Sample," *National Law Journal* (February 13, 1989): 1–5; Richard Harrington, "The Groove Robbers' Judgment: Order on 'Sampling' Songs May Be Rap Landmark," *Washington Post*, December 25, 1991, D1.

72. Steve Hochman, "Judge Raps Practice of 'Sampling,'" *Los Angeles Times*, December 18, 1991, F1.

73. Shawn Taylor, *People's Instinctive Travels and the Paths of Rhythm* (New York: Continuum, 2007), 102.

74. George, *Hip-Hop America*, 89.

75. Rose, *Black Noise*, 79.

76. Silverman's explanation covers only what the *radio stations* did; their blanket licenses from the copyright holders of the sampled compositions (through the performance rights organizations ASCAP and BMI) arguably covered broadcast performances of a sample-based track like "Lesson 1." On the other hand, what Double Dee, Steinski, and Tommy Boy did—fixing the track to vinyl and making copies of it—risked infringing the reproduction and derivative-works rights of both the composition and sound recording copyright holders in the sampled sources. That said, the artists and the label could argue for various defenses to infringement, such as fair use.

77. Bob Gourley, "Pop Will Eat Itself," *Chaos Control Digizine*, 1994, <http://www.chaoscontrol.com/>.

78. Paul Simpson, *The Rough Guide to Cult Pop* (London: Rough Guides, 2003), 199.

79. Mark Rose, *Authors and Owners: The Invention of Copyright* (Cambridge, Mass.: Harvard University Press, 1993), 39.

80. Simon Frith, *Music and Copyright* (Edinburgh, U.K.: Edinburgh University Press, 1993), 5.

CHAPTER 3. THE COMPETING INTERESTS IN SAMPLE LICENSING

1. Sometimes the musical composition copyright is known as the © ("circle-c") copyright, while the sound recording copyright is known as the ℗ ("circle-p") copyright.

2. We say "two *potential* copyrights" to cover situations such as the following: a contemporary artist recording a version of a composition dating from before 1923 and thus having an expired copyright; a sound recording from before 1972—meaning it predates federal protection for sound recordings—that also lacks state-law protection.

for Policy and International Affairs, March 25, 2005, <http://www.copyright.gov/>, 5–6.

43. If sample licensors got together to set specific prices, they would have to deal with the federal antitrust authorities, the Department of Justice, and the Federal Trade Commission. Note that ASCAP and BMI operate under consent decrees from the Department of Justice that constrain their operations; those consent decrees might serve as a model.

44. Interestingly, ASCAP's modern form was strongly affected by antitrust lawsuits and investigation by the Department of Justice. The blanket licenses offered by ASCAP and BMI are each subject to a consent decree monitored by a federal judge. Sanjek and Sanjek, *Pennies from Heaven*, 184–211.

45. A small fraction of songwriters and composers in the United States are represented by a third PRO, the Society of European Stage Authors and Composers (SESAC). In addition to SESAC's original client base of European artists, it has expanded to include United States artists in multiple genres.

CONCLUSION

1. Robert E. Spoo, "Ezra Pound's Copyright Statute: Perpetual Rights and the Problem of Heirs," *UCLA Law Review* 56 (2009): 1775–1834.

2. *Ibid.*, 1832.

3. *Ibid.*, 1797.

4. See Christopher Sprigman, "Reform(aliz)ing Copyright," *Stanford Law Review* 57 (2004): 485–568.

5. See Calabresi and Melamed, "Property Rules, Liability Rules."

6. Perhaps copyright owners could switch rules at a later date, after the initial publication of their work. But they would have to provide notice of the operative rule in some sort of registry. Moreover, all samplers who took advantage of the previous rule would be grandfathered in for sample-based works created at an earlier time.

7. Since each sample implicates two copyrights, a composition and a sound recording, copyright law would have to devise rules to handle situations in which the copyright holders in sampled sources did not agree.

BIBLIOGRAPHY

DISCOGRAPHY

Beastie Boys. *Paul's Boutique*, Capitol CDP 7 91743 2 CD, 1989.
KRS-ONE. *Return of the Boom Bap*. Jive 01241-41517-2, 1993.
Public Enemy. *Fear of a Black Planet*. Def Jam 314 523 446-2 CD, 1990.
Stetsasonic. *In Full Gear*. Tommy Boy Music TBCD 1017, 1988.

LEGAL CASES

Bridgeport Music, Inc. v. Dimension Films. 410 F.3d 792 (6th Cir. 2005).
Bright Tunes Music Corp. v. Harrisongs Music, Ltd. 420 F. Supp. 177 (S.D.N.Y. 1976).
Campbell v. Acuff-Rose Music, Inc. 510 U.S. 569 (1994).
Fantasy, Inc. v. La Face Records. No. C 96-4384 SC ENE, 1997 U.S. Dist. LEXIS 9068 (N.D. Cal. June 24, 1997).
Grand Upright Music Ltd. v. Warner Brothers Records, Inc. 780 F. Supp. 182 (S.D.N.Y. 1991).
Jarvis v. A&M Records. 827 F. Supp. 282 (D.N.J. 1993).
Jean v. Bug Music, Inc. 00 Civ. 4022 (DC), 2002 U.S. Dist. LEXIS 3176 (S.D.N.Y. Feb. 27, 2002).
MGM Studios, Inc. v. Grokster, Ltd. 545 U.S. 913 (2005).
Newton v. Diamond. 388 F.3d 1189 (9th Cir. 2003).
Ringgold v. Black Entertainment Television, Inc. 126 F.3d 70 (2d Cir. 1997).
Sony Corp. of America v. Universal City Studios, Inc. 464 U.S. 417 (1984).
Twentieth Century Music Corp. v. Aiken. 422 U.S. 151 (1975).

Williams v. Broadus. 99 Civ. 10957 (MBM), 2001 U.S. Dist. LEXIS 12894 (S.D.N.Y. August 27, 2001).

WORKS CITED

- Aaron, Charles. "Questlove: The *SPIN* Interview." *SPIN*, June 2008, 84.
- Allen, Harry. "Hip-Hop Hi-Tech." In *Step into a World: A Global Anthology of the New Black Literature*, edited by Kevin Powell, 91–95. New York: Wiley and Sons, 2000.
- Association Littéraire et Artistique Internationale [ALAI]. "Memorandum on Creative Commons Licenses." *Columbia Journal of Law and the Arts* 29 (2006): 261–69.
- Audio Home Recording Act of 1992. Public Law No. 102–563, U.S. Statutes at Large 106 (1992): 4237. Codified at *U.S. Code* 17 (2006), §§ 1001–1010.
- Batey, Angus. *Rhyming and Stealing: A History of the Beastie Boys*. New York: Omnibus Press, 1998.
- Benjamin, Brad. Paul's Boutique Samples and References List, <http://paulsboutique.info/>.
- Biskupic, Joan. "Court Hands Parody Writers an Oh, So Pretty Ruling." *Washington Post*, March 8, 1994, A1.
- Boyes, Georgina. *The Imagined Village: Culture, Ideology and the English Folk Revival*. New York: Manchester University Press, 1993.
- Boyle, James. *The Public Domain: Enclosing the Commons of the Mind*. New Haven, Conn.: Yale University Press, 2008.
- Brabec, Todd, and Jeff Brabec. "CD, Tapes, and Record Sales." American Society of Composers, Authors and Publishers [ASCAP], <http://www.ascap.com/>.
- Brand, Oscar. *The Ballad Mongers: Rise of the Modern Folk Song*. New York: Funk and Wagnalls, 1962.
- Brewster, Bill, and Frank Broughton. *Last Night a DJ Saved My Life: The History of the Disc Jockey*. New York: Grove Press, 2000.
- Breyer, Stephen. "The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs." *Harvard Law Review* 84, no. 2 (1970): 281–355.
- Brief of Amici Curiae Sony BMG Music Entertainment, UMG Recordings, Inc. and Warner Music Inc., June 17, 2005. Filed in *Bridgeport Music, Inc. v. Dimension Films*, 410 F.3d 792 (6th Cir. 2005).
- Broussard, Whitney C. "Current and Suggested Business Practices for the Licensing of Digital Samples." *Loyola Entertainment Law Journal* 11 (1991): 479–503.

- Browne, David. "Settling the Bill: Digital Sampling in the Music Industry." *Entertainment Weekly*, January 24, 1992, 54.
- Bussy, Pascal. *Kraftwerk: Man, Machine and Music*. London: SAF Publishing, 2001.
- Butler, Susan. "Bridgeport Wins Verdict against UMG." *Billboard.biz*, February 13, 2007, <http://www.billboardbulletin.com/>.
- Calabresi, Guido, and A. Douglas Melamed. "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral." *Harvard Law Review* 85 (1972): 1089–1128.
- Catlin, Roger. "Blues Greats Guilty of 'Borrowing,' Too." *Chicago Sun-Times*, July 29, 1992, B41.
- Chanan, Michael. *Musica Practica: The Social Practice of Western Music from Gregorian Chant to Postmodernism*. New York: Verso, 1994.
- Chuck D. *Lyrics of a Rap Revolutionary: Times, Rhymes and Mind of Chuck D*. Beverly Hills, Calif.: Off Da Books, 2006.
- Chusid, Irwin. Liner notes to *Golden Throats 4: Celebrities Butcher Songs of the Beatles*, Rhino/Wea B0000033XB CD, 1997.
- Clarkson, Austin. *Stefan Wolpe: A Brief Catalogue of Published Works*. Islington, U.K.: Sound Way Press, 1991.
- Coase, Ronald H. "Why Economics Will Change." Lecture presented at the University of Missouri, Columbia, April 4, 2002, The Ronald Coase Institute, <http://www.coase.org/>.
- Cohen, Julie, Lydia Pallas Loren, Ruth Gana Okediji, and Maureen A. O'Rourke. *Copyright in a Global Information Economy*. New York: Aspen Law and Business, 2002.
- Coleman, Brian. *Check the Technique: Liner Notes for Hip-Hop Junkies*. New York: Villard Books, 2007.
- Cutler, Chris. "Plunderphonics." In *Sounding Off! Music as Subversion/Resistance/Revolution*, edited by Ron Sakolsky and Fred Wei-Han Ho, 67–86. Brooklyn, N.Y.: Autonomedia, 1995.
- Dahlen, Chris. "David Byrne." *Pitchfork.com*, July 17, 2006, <http://pitchfork.com/>.
- Dean, Katie. "Remixing to Protest Sample Ruling." *Wired.com*, September 22, 2004, <http://www.wired.com/>.
- de Fontenay, Eric. "Should Artists Pay for Labels' Mistakes?" *Musicdish.com*, September 6, 2001, <http://www.musicdish.com/>.
- Demers, Joanna. *Steal This Music: How Intellectual Property Law Affects Musical Creativity*. Athens: University of Georgia Press, 2006.
- Demsetz, Harold. "Information and Efficiency: Another Viewpoint." *Journal of Law and Economics* 12, no. 1 (1969): 1–22.
- DiCola, Peter. "Sequential Musical Innovation and Sample Licensing." In "Es-

says on Regulation of Media, Entertainment, and Telecommunications." Ph.D. diss., University of Michigan, 2009, 76–112.

Diehl, Matt. "The Making of *Paul's Boutique*." *Rolling Stone*, December 11, 2003, 138.

Digital Performance Right in Sound Recordings Act of 1995. Public Law No. 104–39, U.S. Statutes at Large 109 (1995): 336. Codified at *U.S. Code* 17 (2006), §§ 106, 114, 115.

Dixon, Willie. *I Am the Blues: The Willie Dixon Story*. With Don Snowden. New York: Da Capo, 1989.

Drumming, Neil. "How Kanye Got 'Down' without Lauryn." *Entertainment Weekly*, April 16, 2004, 78.

Drummond, Bill, and James Cauty. *The Manual (How to Have a Number One the Easy Way)*. London: KLF Publications, 1989.

Dunn, Christopher. *Brutality Garden: Tropicália and the Emergence of a Brazilian Counterculture*. Chapel Hill: University of North Carolina Press, 2001.

Dyson, Frances. "The Ear That Would Hear Sounds in Themselves: John Cage, 1935–1965." In *Wireless Imagination: Sound, Radio, and the Avant-Garde*, edited by Douglas Kahn and Gregory Whitehead, 373–408. Cambridge, Mass.: MIT Press, 1994.

England, Phil. "That's Irritainment." *Wire*, June 2008, 22.

English, Timothy. *Sounds Like Teen Spirit: Stolen Melodies, Ripped-Off Riffs, and the Secret History of Rock and Roll*. New York: iUniverse Star, 2007.

Evolution Control Committee. "Past Releases: The Whipped Cream Mixes." Evolution Control Committee, <http://evolution-control.com/>.

Ewen, David. *Composers of Tomorrow's Music: A Non-Technical Introduction to the Musical Avant-Garde Movement*. New York: Dodd, Mead and Company, 1971.

Feld, Steven. "Pygmy Pop: A Genealogy of Schizophonic Mimesis." *Yearbook for Traditional Music* 28 (1996): 1–35.

Fisher, William W. III. *Promises to Keep: Technology, Law, and the Future of Entertainment*. Stanford, Calif.: Stanford University Press, 2004.

Frey, Darcy. "One Very, Very Indie Band." *New York Times Magazine*, March 4, 2007, 31.

Fricke, Jim, and Charlie Ahearn. *Yes Yes Y'all: The Experience Music Project Oral History of Hip-Hop's First Decade*. New York: Da Capo, 2002.

Frith, Simon. *Music and Copyright*. Edinburgh, U.K.: Edinburgh University Press, 1993.

George, Nelson. *Hip-Hop America*. New York: Viking, 1998.

Goldberg, David, and Robert J. Bernstein. "Reflections on Sampling: A Sampler of Issues." *New York Law Journal* (January 15, 1993): 3.

Gourley, Bob. "Pop Will Eat Itself." *Chaos Control Digizine*, 1994, <http://www.chaoscontrol.com/>.

Green, Jerry R., and Suzanne Scotchmer. "On the Division of Profit in Sequential Innovation." *RAND Journal of Economics* 26, no. 1 (1995): 20–33.

Hager, Steven. *Hip Hop: The Illustrated History of Break Dancing, Rap Music, and Graffiti*. New York: St. Martin's Press, 1984.

Hardin, Garrett. "The Tragedy of the Commons." *Science* 162, no. 3859 (December 13, 1968): 1243–48.

Harrington, Richard. "The Groove Robbers' Judgment: Order on 'Sampling' Songs May Be Rap Landmark." *Washington Post*, December 25, 1991, D1.

Heller, Michael. *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*. New York: Basic Books, 2008.

Henken, John. "Sounding Off by the Numbers: Making Music the MIDI Way." *Los Angeles Times*, October 16, 1988, Calendar, 66.

Hochman, Steve. "Judge Raps Practice of 'Sampling.'" *Los Angeles Times*, December 18, 1991, F1.

———. "Willie Dixon's Daughter Makes Sure Legacy Lives On." *Los Angeles Times*, October 8, 1994, F10.

Hughes, Justin. "Market Regulation and Innovation: Size Matters (or Should) in Copyright Law." *Fordham Law Review* 74 (2005): 575–637.

Jenkins, Mark. "In Negativland's Plus Column." *Washington Post*, September 20, 1998, G4.

Jones, Charisse. "Haven't I Heard that 'Whoop' (or 'Hoop') Somewhere Before?" *New York Times*, December 22, 1996, B44.

Jones, LeRoi. *Blues People: Negro Music in White America*. New York: Harper-Collins, 1963.

Kaplow, Louis. "Rules versus Standards: An Economic Analysis." *Duke Law Journal* 42 (1992): 557–629.

Katz, Mark. *Capturing Sound: How Technology Has Changed Music*. Los Angeles: University of California Press, 2004.

Katz, Zachary. "Pitfalls of Open Licensing: An Analysis of Creative Commons Licensing." *IDEA: The Intellectual Property Law Review* 46 (2006): 391–413.

Keyes, Cheryl L. *Rap Music and Street Consciousness*. Urbana: University of Illinois Press, 2002.

Klein, Joe. *Woody Guthrie: A Life*. New York: Delta Trade Paperbacks, 1980.

KLF Communications. "KLF Info Sheet: Jan 22 1988." *The Library of Mu*, <http://www.libraryofmu.org/>.

Kun, Joshua. *Audiotopia: Music, Race, and America*. Berkeley: University of California Press, 2005.

———. "A Select History of Found Sound." *Option*, March–April 1997, 65–68.

Kurtz, Leslie A. "Digital Actors and Copyright—From *The Polar Express* to *Simone*." *Santa Clara Computer and High Technology Law Journal* 21 (May 2005): 783–805.

Kwall, Roberta Rosenthal. "The Attribution Right in the United States: Caught in the Crossfire between Copyright and Section 43(a)." *Washington Law Review* 77 (2002): 985–1033.

Landes, William M., and Richard A. Posner. *The Economic Structure of Intellectual Property Law*. Cambridge, Mass.: Belknap Press, 2003.

Last, Jonathan V. "The Samples: A Tale of Morality, Technology, Biggie, and the Law." *Weekly Standard*, March 31, 2006, <http://weeklystandard.com/>.

Lawrence, Tim. *Love Saves the Day: A History of American Dance Music Culture, 1970–1979*. Durham, N.C.: Duke University Press, 2003.

Lebrecht, Norman. "Echoes Strike a Chord." *Daily Telegraph*, May 11, 1996, 7.

Lee & Thompson. "Royalties: Other Uses." In *Guide to Music Industry Agreements*, § 3.10, <http://www.leeandthompson.com/>.

Leeds, Jeff. "Dispute over Sampling Fees Has George Clinton in a Legal Funk." *Los Angeles Times*, May 20, 2001, C-1.

LeRoy, Dan. *Paul's Boutique*. New York: Continuum, 2006.

Lessig, Lawrence. "Free(ing) Culture for Remix." *Utah Law Review* 4 (2004): 961–75.

———. *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. New York: Penguin Press, 2008.

Levine, Robert. "Steal This Hook? D.J. Skirts Copyright Law." *New York Times*, August 6, 2008, <http://www.nytimes.com/>.

Library Copyright Alliance. Letter to Jule L. Sigall, Associate Register for Policy and International Affairs, March 25, 2005, <http://www.copyright.gov/>.

Lockwood, Lewis. *Beethoven: The Music and Life*. New York: Norton, 2003.

MacDonald, Malcolm. *Brahms*. New York: Oxford University Press, 2001.

Marshall, Wayne. "'Mad Mad' Migration: Caribbean Circulation and the Movement of Jamaican Rhythm." Paper presented at the Caribbean Soundscapes conference, March 11, 2004, Wayne&wax, <http://www.wayneandwax.com/>.

McGonigal, Mike. *Loveless*. New York: Continuum, 2007.

McLeod, Kembrew. *Freedom of Expression*: Resistance and Repression in the Age of Intellectual Property*. Minneapolis: University of Minnesota Press, 2007.

Merges, Robert P. "Of Property Rules, Coase, and Intellectual Property." *Columbia Law Review* 94 (1994): 2655–73.

Miles, Barry. *Paul McCartney: Many Years from Now*. New York: Owl Books, 1997.

Miller, Chuck. Liner notes to *Dickie Goodman and Friends, The King of Novelty: Greatest Fables*, vol. 2, Luniverse B000Y5D5YE CD, 1998.

Mills, Sherylle. "Indigenous Music and the Law: An Analysis of National and International Legislation." *Yearbook for Traditional Music* 28 (1996): 57–86.

Morse, Steve. "Setting the New Market in Sampling." *Boston Globe*, March 3, 2002, L1.

Moss, Mark D. "Who Owns the Songs the Whole World Sings?" *Sing Out! Folk Song Magazine* 42, no. 1 (spring 1998): 3.

Negativland. "Negativland and the RIAA." *NegativWorldWideWebLand*, <http://www.negativland.com/>.

Netanel, Neil Weinstock. *Copyright's Paradox*. Oxford: Oxford University Press, 2008.

Nimmer, Melville, and David Nimmer. *Nimmer on Copyright*. Rev. edn. 6 vols. New Providence, N.J.: Matthew Bender, 2009.

Ong, Walter. *Orality and Literacy*. New York: Routledge, 1982.

Oswald, John. "Creatigality." In *Sounding Off! Music as Subversion/Resistance/Revolution*, edited by Ron Sakolsky and Fred Wei-Han Ho, 87–90. Brooklyn, N.Y.: Autonomedia, 1995.

Passman, Donald S. *All You Need to Know about the Music Business*. 4th edn. New York: Simon and Schuster, 2000.

Perry, Imani. *Prophets of the Hood: Politics and Poetics in Hip Hop*. Durham, N.C.: Duke University Press, 2004.

Peters, Tamara C. "Infringement of the Adaptation Right: A Derivative Work Need Not Be 'Fixed' for the Law to Be Broken." *Journal of the Copyright Society of the U.S.A.* 53 (2006): 401–46.

Plant, Arnold. "The Economic Aspects of Copyright in Books." *Economica* 1, no. 2 (May 1934): 167–95.

Polansky, Larry. "The Early Works of James Tenney." In *The Music of James Tenney*, edited by Peter Garland, 119–294. Santa Fe, N.M.: Soundings Press, 1984.

Pouncey, Edwin. "Rock Concrete: Counterculture Plugs into the Academy." In *Undercurrents: The Hidden Wiring of Modern Music*, edited by Rob Young, 153–62. London: Continuum, 2002.

Prato, Greg. "Dickie Goodman: Biography." *AllMusicGuide.com*, <http://www.allmusicguide.com/>.

Recording Industry Association of America [RIAA]. "Gold & Platinum: Searchable Database." *RIAA.com*, <http://www.riaa.com/>.

Reighley, Kurt B. *Looking for the Perfect Beat: The Art and Culture of the DJ*. New York: Pocket Books, 2000.

Reilly, Tracy L. "Debunking the Top Three Myths of Digital Sampling: An Endorsement of the Bridgeport Music Court's Attempt to Afford 'Sound' Copyright Protection to Sound Recordings." *Columbia Journal of Law and the Arts* 31 (2008): 355–408.

Revell, David. *The Roaring Silence: John Cage—A Life*. New York: Arcade, 1992.

Ritz, David. *The Adventures of Grandmaster Flash: My Life, My Beats*. New York: Broadway Books, 2008.

Robert. "Ghostface Killah Wins Copyright Infringement Case." *Rap News Network*, October 27, 2003, <http://www.rapnews.net/>.

Rose, Mark. *Authors and Owners: The Invention of Copyright*. Cambridge, Mass.: Harvard University Press, 1993.

Rose, Tricia. *Black Noise: Hip-Hop Music and Black Culture in Contemporary America*. Hanover, N.H.: Wesleyan University Press, 1994.

Russcol, Herbert. *The Liberation of Sound: An Introduction to Electronic Music*. Englewood Cliffs, N.J.: Prentice-Hall, 1972.

Russell, Deborah. "Judge Clips Biz Markie on Sampling Issue." *Billboard*, January 4, 1992, 1.

RZA [Robert Diggs]. *The Wu-Tang Manual*. With Chris Norris. New York: Riverhead, 2005.

Sanjek, David. "Don't Have to DJ No More: Sampling and the 'Autonomous' Creator." *Cardozo Arts and Entertainment Law Journal* 10 (1992): 607–24.

Sanjek, Russell, and David Sanjek. *Pennies from Heaven: The American Popular Music Business in the Twentieth Century*. New York: Da Capo, 1996.

Sarig, Roni. *Third Coast: OutKast, Timbaland, and How Hip-Hop Became a Southern Thing*. New York: Da Capo, 2007.

Schumacher-Rasmussen, Eric. "Owners of P-Funk Catalog Sue over 500 Samples." *MTV.com*, June 11, 2001, <http://www.mtv.com/>.

Scott, Jeffrey. "Will Federal Pact Slash CD Costs?" *Atlanta Journal and Constitution*, May 12, 2000, 1G.

Seeger, Anthony. "Ethnomusicologists, Archives, Professional Organizations, and the Shifting Ethics of Intellectual Property." *Yearbook for Traditional Music* 28 (1996): 87–105.

Shapiro, Peter. *Turn the Beat Around: The Secret History of Disco*. New York: Faber and Faber, 2005.

Shapiro, Samantha M. "Hip-Hop Outlaw (Industry Version)." *New York Times Magazine*, February 18, 2007, 29.

Sheffield, Rob. "Beat Pirates." *Blender*, April 2009, 40–41.

Sheppard, David. "What Kept You?" *MOJO Magazine*, May 2008, 62–67.

Shiver, Jube Jr. "Digital Double Trouble: From Rap Music to Medical Formulas, Little Seems Safe from Duplication." *Los Angeles Times*, April 11, 1994, A1.

Simpson, Paul. *The Rough Guide to Cult Pop*. London: Rough Guides, 2003.

Snowden, Don. "Sampling: A Creative Tool or License to Steal?" *Los Angeles Times*, August 6, 1989, Calendar, 61.

Soocher, Stan. "License to Sample." *National Law Journal* (February 13, 1989): 1–5.

Spoo, Robert E. "Ezra Pound's Copyright Statute: Perpetual Rights and the Problem of Heirs." *UCLA Law Review* 56 (2009): 1775–834.

Sprigman, Christopher. "Reform(aliz)ing Copyright." *Stanford Law Review* 57 (2004): 485–568.

Tape-beatles. "The Tape-beatles Undergo Severe Trauma, Depression." *Retro-Futurism*, no. 13 (July 1990): 1596–97.

Taylor, Sam. "Top Ten Lawsuits." *Observer*, January 31, 1999, 14.

Taylor, Shawn. *People's Instinctive Travels and the Paths of Rhythm*. New York: Continuum, 2007.

Toop, David. *Ocean of Sound: Aether Talk, Ambient Sound and Imaginary Worlds*. New York: Serpent's Tail, 1995.

———. *Rap Attack 2: African Hip-Hop to Global Hip-Hop*. London: Serpent's Tail, 1991.

Union Square Music. "The Story of Curtom." Union Square Music, <http://www.unionsquaremusic.co.uk/>.

U.S. Code 17 (2006).

U.S. Congress. House of Representatives. Committee on Energy and Commerce. Subcommittee on Telecommunications and the Internet. *The Digital Future of the United States: Part II, the Future of Radio*, 110th Cong., 1st session, March 7, 2007.

U.S. Constitution, art. I, § 8, cl. 8.

U.S. Copyright Office. "Mechanical License Royalty Rates." U.S. Copyright Office, <http://www.copyright.gov/>.

Vaidhyanathan, Siva. *Copyrights and Copywrongs, The Rise of Intellectual Property and How It Threatens Creativity*. New York: Fast Track, 2001.

Veal, Michael E. *Dub: Soundscapes and Shattered Songs in Jamaican Reggae*. Middletown, Conn.: Wesleyan University Press, 2007.

Vega, Suzanne. "Tom's Essay." *New York Times*, September 23, 2008, <http://measureformasure.blogs.nytimes.com/>.

Watkins, Glenn. *Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists*. Cambridge, Mass.: Belknap Press, 1994.

Weheliye, Alexander G. *Phonographies: Grooves in Sonic Afro-Modernity*. Durham, N.C.: Duke University Press, 2005.

Wu, Tim. "Jay-Z versus the Sample Troll." *Slate.com*, November 16, 2006, <http://www.slate.com/>.