A Call For Change in Copyright Law: The Seven Second Free Zone

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Abstract

A proposal is made to permit up to seven seconds of sound recordings to be sampled and used in new works without requiring a license from the owners of the composition and sound recording copyrights.

The high-quality sample-heavy collages that were released during the Golden Age of Hip-Hop (1986-1992) are examples of the type of music that could not be made in the present legal climate. The innovative and imaginative use of sampling by groups such as Public Enemy and The Beastie Boys was effectively stopped by lawsuits brought in the 1990s, greatly reducing the number and variety of samples used in subsequent productions. The proposed change in sampling law would allow musicians to incorporate samples without having to go through the cumbersome and expensive process of obtaining clearances that currently impedes creativity and deprives the public of interesting work and the experience of the direct juxtaposition of old and new.

Introduction

Twenty years ago a series of legal decisions established that musicians must get permission to use samples of recorded music in new productions. The process of obtaining clearances, however has since become too cumbersome and expensive for most musicians, limiting what they can produce and deliver to the public. Several options have been proposed for adjusting the copyright system, but none of these will produce the conditions necessary to allow the creation of classic albums such as those from Public Enemy and The Beastie Boys, or more recently those of Gregg Gillis (aka Girl Talk). I propose amending copyright law to permit the unrestricted use of samples of up to seven seconds from existing recordings in order to foster creativity and balance the rights of copyright owners with society's interest in tapping into the flow of digital media now available online. It is expected that such a policy will be resisted by copyright holders. Record labels may see licensing of samples of music in their catalog as a source of income, made more valuable in the age of declining CD sales, but allowing sampling of catalog music may end up increasing sales of catalog music by continuing to remind the public of its existence. Samples taken from records do not negatively affect sales of the original, and it is time to adapt to the changes in society brought on by growing digital communication and to empower the public to build on what is available.

In the 1990s a number of lawsuits were filed by copyright holders to collect sampling fees, which had a chilling effect on artists creating new works. Most settled in favor of copyright holders, and the prospect of incurring legal fees and losing cases pushed labels into clearing all samples before releasing albums. Sampling became expensive. Two licenses are often required: one for the sound recording and another for

the underlying composition of music and lyrics. Musicians with major label record deals usually do not own the sound recording copyrights of their music. Even so many musicians and engineers feel that they have applied great effort to develop their craft and time, energy, and expense in the studio to record their albums, and that others should not be allowed to simply appropriate their work. It is understandable for someone to want control to decide when to allow the reuse of their music, in order to prevent it from being used for projects whose purpose or message is something with which they do not want to be associated. The United States copyright system does not adhere to the protection of moral rights prescribed in the Berne Convention enjoyed by musicians in Europe and Latin America. These include the author's "right to...object to any distortion, mutilation, or other modification of, or other derogatory action in relation to the said work which would be prejudicial to his honor or reputation" (Pettenati, 2000). Moral rights cannot be transferred during the lifetime of the author, who also has the right to withdraw the work from the public. Copyright law in the United States to strike a balance simply between the economic interests of creators with the benefit to society and does not include protection for a creator's intentions or reputation.

The issue of moral rights is important, whether or not they are covered by law, but they need to balanced with society's interest. A sample of up to seven seconds and its repurposing in a new work would not distort or mutilate the recording from which it came, as the original will always remain intact in its original form. Such a limited excerpt would not confuse the listener into thinking they are hearing the entire original work, and as the creation of sonic collages become commonplace listeners will be accustomed to

hearing snippets of familiar sounds in new contexts and will understand that they have been appropriated, thereby insulating the honor and reputation of the original creator.

In addition to the notion of sampling being disrespectful to the effort that went into creating original recordings and wanting to maintain one's image, owners of copyrights sometime assert that sampling negatively affects sales of their work. However, it seems unlikely that having up to seven seconds of a sample of a record embedded in a new production would satisfy the listener's desire to hear the original and make them less likely to purchase it. On the contrary, sampling may *increase* the sale of the original by reminding the listener of its existence. George Clinton, the mastermind behind the Parliament and Funkadelic bands of the 1970s and '80s understands the benefits for older generations of artists of being sampled by younger artists. Many of his albums that had gone out of print were brought back due to interest generated from the sampling of them on later projects.

There are four main problems with the current licensing system: the expense of clearing samples, the relationships with publishers that one needs to obtain them, the bureaucracy of the process, and complications that result from delays (McLeod and DiCola, 2011). A change in the law needs to take place in order to make the clearing of samples affordable, not just for the benefit of those who want to use them in their productions, but for those in the public who would like to consume them. While it is impossible, due to the many factors involved, to accurately predict the costs that would be involved in clearing the hundreds of samples that went into classic albums made during the Golden Age of hip-hop, McLeod and DiCola, authors of *Creative License* estimate that Public Enemy would have lost \$4.47 per copy on *Fear Of A Black Planet*

and The Beastie Boys \$7.87 per copy on *Paul's Boutique* if today's rules regarding sampling were in effect at the time those classic albums were produced. These estimates are based on prices of licenses if they are paid before the album is released. This would, require an upfront investment, before knowing if an album was going to make money. If one waited to clear an album after it is finished the holder of copyright would be at a greater advantage during negotiations and would likely charge more for permission, or deny the use entirely. Today only the most commercially successful artists can afford to include samples in their songs, and usually then only a small number are used.

The second problem that Mcleod and DiCola identify with the current legal situation affects independent artists who have an additional hurdle to clearing samples. They are at a disadvantage compared with those at major labels since they lack the necessary personal relationships with the people inside publishing companies who make the deals. Without those connections requests for cooperation are likely be delayed and higher prices charged, further delaying projects and increasing their costs. Attending to requests for sample clearances is not a high priority for record labels, and if you don't know the right person to talk to it is likely the process will take several months.

The bureaucracy of clearing samples also interferes with the creative process.

Finding copyright holders for older recordings is difficult, particularly with independent artists and unsigned groups. There are upfront search costs involved in locating the holders of sound recording and composition rights, which have in many cases been sold to others over the years. Even when the discovery process seems to be delivering results it is hard to obtain proof that the entities being negotiated with actually own the material outright and that no other publishers are involved. A lot of money can be invested

without being successful in finding the responsible parties. In the cases of multiple samples all the time and expense is wasted getting permission to use some of the samples if the owner of one of them holds out or refuses to cooperate.

The timing of album releases is also complicated when samples have to be cleared. Hold-up costs are incurred if a group has to rework a track or remaster an entire album. Changing the release date of a project interfere with plans for its promotion, and a label's interest a group that gets out of line may wane.

Another conundrum is the result of the entanglements that arise from sampling a record which itself contains samples. For example, when Jay-Z sampled less than two seconds of KRS-ONE's vocals for his track "Takeover" he also had to license all of the other elements sampled in the remaining four minutes and sixteen seconds of song, even though they were not heard in the new song. This will only get worse over time. The chain of musical borrowing caused by royalty stacking is going to be an increasingly difficult knot to untangle and at some point will grind the gears of historical references to a halt. Should someone want to use Jay-Z's song in the future they will have to negotiate with the artists he sampled, as well as the artists they sampled. Movie companies are understandably reticent to risk being sued by some party that was not known to have an interest in some part of a work. Whole chunks of the past may become unavailable as ownership becomes more difficult to ascertain.

While it might be more practical and affordable to clear samples during the process of composition and production, doing so would have a detrimental affect on the creative process. The psychologist Mihaly Csikszentmihalyi (1990) is one of the leading researchers on creativity and has identified a number of conditions necessary to enter its

characteristic "flow" state. Having to stop and request permission to use each sample interrupts this experience, and when the answer takes weeks or months to come back the process is derailed completely. The impediment to the creative process caused by the demands of the present requirement to clear all samples and resulting time and money to do so prevents sample-based music from being produced, which deprives those in society who would find the experience of listening to it enjoyable. Creative activity is one of the avenues that citizens can exercise in their pursuit of happiness and is something that society should support. People who experience a lot of flow in their daily lives often have higher self-esteem and greater health, including the feeling that one has control. A better balance needs to be found between the rights of owners of composition and sound recording copyrights and the public's interest in benefitting from the reservoir of recorded music floating through society. The cost of licenses to use samples and the transaction friction in the bureaucracy of obtaining them is high for sample-based music to be commercially released. The process is complicated and is best done by a manager or a lawyer, and now that it is believed that every sample, no matter how short, needs to be cleared, owners of copyright hold the upper hand in negotiations, which drives the prices up.

Artists' Views of Sampling

In many cases fees would be lower or waived if negotiations took place between artists, but usually it is the label that owns the copyrights to sound recordings. George Clinton has worked with many artists and believes that rates do not have to be as high as they often are today: "It can be done real cheap with no lawsuits" (RTT News, 2012).

Many artists such as Dr. Dre made sampling deals when possible with artists like Clinton. Mark Hosler is another artist who supports the sampling of his music by other musicians. "Negativland has no problem with whatsoever ... Negativland has been sampled in records that have gone platinum ... Negativland uses a lot of sound sounds on their own records." (McLeod and DiCola, 2011).

Clearing samples before an album is finished is cheaper and more efficient for producers because they are in a better bargaining position and don't have to go back and rework projects if copyright holders hold out for high fees or to refuse permission outright. Unfortunately, sample clearance expert Danny Rubin says that most licensors want to hear a song before they grant permission (McLeod and Dicola, 2011). This makes it hard for the artist to do their work. Knowing from the beginning which samples can be cleared makes the composer's process much easier, since having to stop to consider whether a sample can be cleared is an impediment to the creative process, and going back later to take out a sample for which clearance is too expensive or simply not available can undo a song's fabric to the point where it falls apart and the composition is ruined.

Chuck D describes the change in Public Enemy's work after 1991: "Public Enemy's music was affected more than anybody's because we were taking thousands of sounds. If you separated the sounds, they wouldn't have been anything--they were unrecognizable. The sounds were all collaged together to make a sonic wall. Public Enemy was affected because it is too expensive to defend against a claim. So we had to change our whole style, the style of *It Takes a Nation* and *Fear of a Black Planet*, by 1991" (McLeod, 2002). The Beastie Boys made the same adjustment, using many fewer samples on their *Check Your Head* album.

In order to avoid having to pay for sound recording licenses to sample well known songs, Dr. Dre and others have resorted to re-recording grooves with live players. This is known as "interpolation", or "replays", and was suggested by the judge in *Bridgeport* as the legal alternative to sampling: "If an artist wants to incorporate a 'riff' from another work in his or her recording, he is free to duplicate the sound of that 'riff' in the studio", leaving them only liable for the license to use the composition of that song. "Rapper's Delight" (1979), the first rap single to become a Top 40 hit used an interpolation of the instrumental "Good Times" by Chic as its harmonic and rhythmic foundation. Nile Rodgers, one of the composers of the original song threatened a lawsuit and the song credits on the new album were changed. Something is lost, though, in not being able to use the original recording, as explained by Hank Shocklee:

We were forced to start using different organic instruments, but you can't really get the right kind of compression that way. A guitar sampled off a record is going to hit differently than a guitar sampled in the studio. The guitar that's sampled off a record is going to have all the compression that they put on the recording, the equalization. It's going to hit the tape harder. It's going to slap at you. Something that's organic is almost going to have a powder effect. It hits more like a pillow than a piece of wood. So those things change your mood, the feeling you can get off of a record. If you notice that by the early 1990s, the sound has gotten a lot softer." (McLeod, 2002)

There will be those who are determined to continue incorporating samples into their work but are not able to do so legally. They will be faced with choosing between selling a few copies and remaining underground, or trying to edit, layer and/or distort the material in order to disguise the source.¹

In 2004 Brian Burton, better known as DJ Danger Mouse had the inspired idea of mashing up Jay-Z's vocals on *The Black Album* with instrumental sections of The Beatles *The White Album* to create a new work called *The Grey Album*. The work was facilitated by Jay-Z's having released the a cappella tracks from his record for DJs to remix. Burton pressed 3,000 copies which he distributed as demonstrations of his work. EMI, who represented Capitol Records' sound recording rights, and Sony Publishing, owner of the composition rights sent him cease and desist letters, which he promptly obeyed, removing his remaining copies from circulation. *The Grey Album* however became an Internet sensation and received rave reviews in the press. While it was an underground hit many people who might have enjoyed the work missed out, and no one made any money. A review of the artistic fruits and legal challenges in Golden Age of hip-hop will help to understand how current guidelines evolved, and why it is important to change them.

The Golden Age of Hip-Hop (1986–1992)

Public schools in the Bronx suffered disproportionate cuts to music education in during the late 1960s and '70s.² This, combined with families' inability to afford musical instruments and private lessons at home, led young people to turn to their parents' record

¹ This has always been a risky approach, and may become even more so in the future as the opportunity for sample trolls to make money by combining new forensic tools with more powerful automatic searching and matching between databases

² Rodriguez, William. E-mail message to author. March 3, 2014.

collection in order to exercise their creative energy (Schloss, 2004). At parties MCs talked to the audience while DJs played and manipulated the best grooves on the most popular albums. Over time MCs turned into rappers and DJs into the producers of the instrumental tracks. Cueing and scratching techniques were developed, turning the record player into a musical instrument. Beginning in 1984 affordable sampling keyboards and modules came on the market that allowed producers to use sounds lifted from records as single shots or looped as backgrounds, and for a few years, until mainstream record labels caught on to growing hip-hop sales, a new form of sample-based music was born based on musical collages.

The first sample playback instruments used in hip-hop were drum machines like the Oberheim DMX, which was combined with synthesizers for the production of Run-D.M.C.'s first hit "It's Like That." These instruments played recordings of sounds but did not allow their users to replace them with their own samples. The programming of patterns and stringing them together in drum machine memory set the stage for the repetitive looping structures that were to follow with the development of more flexible samplers and sequencers.

The Golden Age of rap falls roughly between 1986 and 1992, beginning with the commercial breakthrough of Run-D.M.C.'s release of *Raising Hell* (which achieved triple-platinum status and showed hip-hop's commercial potential) and ending with the United States District Court's decision mandating the clearing of every sample. This time period was characterized by experimentation, innovative albums, clever word play in the lyrics, concern with social issues and black nationalism, stylistic variation, and sample-based music. Albums like De La Soul's *3 Feet High & Rising* (1989), Public Enemy's

Yo! Bum Rush The Show (1987) It Takes a Nation of Millions to Hold Us Back (1988) and Fear of a Black Planet (1991), and Beastie Boys' Paul's Boutique (1989) used hundreds of samples to create complex textures using the new affordable sampling instruments that had to appear after 1984 that held up to 12 seconds of audio. The musicians would record sounds into them and play them back from keyboards. In some cases they also manipulated turntables to play back sounds from records as had been done in the previous Old School style in the 1970s.

Sample-based music was produced by a community. Many DJs like Afrika Bambaataa had large record collections and knew what the public liked to dance to from their experience working in public at clubs and parties. DJs began by sampling records of popular artists, particularly James Brown. Breaks played by his drummer, Clyde Stubblefield started showing up on many new recording. Producers gradually used up the records they could find at home and went in search for rare, out of print material in stores, thrift shops, and garage sales. The process of searching through stacks of LPs, known as "digging in crates" was a socializing activity as DJs exchanged information about where they found records, shared and traded, and did favors for each other. This process was seen as part of paying one's dues in the DJ tradition, and in the process provided an education in popular music (Schloss, 2004). While they were entertaining the audience either live in clubs or producing records they were also signaling to other producers their mastery of technique and knowledge of culture by quoting older artists.

Searching for disks enriched the culture. During the many hours spent looking for and studying albums DJs got an education in the music of the past and became aware of a variety of styles such as jazz, soul, rock and roll. It made them acutely sensitive to

"groove"—a term extended from its original meaning of the path the needle travelled on the surface of the record to describe the propulsive rhythmic feel created by the interaction of drums, bass, guitar, and other instruments, that set heads bopping, feet tapping, and turned listeners into dancers.

The countless hours spent listening to hundreds of records and experimenting with juxtaposing bits and pieces of one with another developed the expertise that helped DJs process a song and store it in memory tagged with many different attributes, such as tempo, instrumentation, style, feel, riff potential, and timbre. That repertoire would be held in a multi-dimensional filing system that could be accessed from any combination of parameters. As Schloss (2004) noted, "Part of the creativity of sampling is in knowledge not just of certain songs but also every part of those songs". As DJs developed their ability to concentrate, retain information, deconstruct, and reorganize a large repertoire, new skills were learned leading to more complex brain structure.

It could be that the wordplay and a high level of awareness reflected in themes of social consciousness reflected in the lyrics of music produced during the Golden Age of hip-hop was connected with the sophisticated manipulation of samples, that in the process of developing their sensitivity and respect for music DJs became more particular in their choice of lyrics to complement the instrumental backing tracks that grew from a widened vision and sensitivity to sound and musical culture. On the other hand, the sophistication of the lyrics in sample-based music could also be related to the difference in educational backgrounds between the pioneers of sample-based music and those that came after them. The leaders of Public Enemy came together at Adelphi University. Russell Simmons enrolled at CCNY-Harlem and his Def Jam partner Rick Rubin went to

NYU, and Adam Yauch (founding member of The Beastie Boys) attended Bard College, whereas the figureheads of the gangsta rap that came next on the scene such as Tracy Marrow (aka Ice-T) got his education in the Army, and Calvin Boradus, Jr. (Snoop Dogg) went from high school to prison.

Producers today no longer search through a wide range of recordings to find material to sample. Software programs such as Fruity Loops, Reason, and Ableton Live make it easier to produce looping structures to form the foundation of tracks. The instant gratification that comes with easy assembly would seem to make it easier to be impressed with one's creations when becoming steeped in the work of those who came before is not required. Today's common choice of lyrics of braggadocio, sexual exploits, and violence, and other lower-consciousness sentiments might not have combined as well with intricate, multi-layered sound textures such as achieved by Public Enemy in the past. It seems likely that the process of becoming intimately familiar with classic tracks by artists over a period of many years and styles would develop a respect for other musicians and have a humbling effect. Digging through piles of records from musicians whose careers have passed reminds young musicians of their own mortality, that they themselves will become part of the stacks of forgotten music, and puts their contributions in perspective (Pray, 2002). Hip-Hop producer Pet Rock puts it this way: "Subtract sampling and you get ignorance...Cats are not open to learning about what was before them." In an interview with Erik Nielson, Hank Shocklee said "When you take sampling out of the equation much of the social consciousness disappears, because artists' lyrical reference point only lies within themselves" (McLeod and DiCola, 2011). In a followup article, Nielson states that "without a sense that they are part of something bigger, something collective, I think

it becomes all too easy for them to forego socially conscious messages in favor of the tired, narcissistic lyrics that dominate radio rotations and *Billboard* charts" (Nielson, 2013).

Nielson notes that there are other factors at play causing themes in contemporary music to have changed, and not everything can be traced to the presence or lack of samples in a song. There is a "conscious rap" sub-genre today that focuses on creating awareness and spreading knowledge with songs that don't include samples. There are also songs that don't reveal an advanced level of thinking that include samples. But their inclusion today may be more as status symbols rather than homages to the past, since only the most successful performers can afford to license well-known samples in their releases, now that the cost has skyrocketed.

Key Lawsuits

The legality of incorporating samples from other musicians' records in new projects was not clear at the beginning of the Golden Era. Hank Shocklee said that Public Enemy did not consider the type of sampling they were doing to be illegal. "The only time copyright was an issue was if you actually took the entire rhythm of a song, as in looping, which a lot of people are doing today. You're going to take a track, loop the entire thing, and then that becomes the basic track for the song. They just paperclip a backbeat to it. But we were taking a horn hit here, a guitar riff there, we might take a little speech, a kicking snare from somewhere else. It was all bits and pieces." journalist Harry Allen generalized "Some of those first sampling cases...it wasn't that they were trying to be thieves or trying not to get caught. It was just like, we kind of didn't know" (McLeod

and DiCola, 2011). As time went by this lax attitude changed as publishers began to sue hip-hop labels with hit records following the old music industry adage, "Where there's a hit there's a writ." Hank Shocklee said that they began to clear samples after projects were finished: "A lot of stuff was cleared afterwards. Back in the day, things was different. The copyright laws didn't really extend into sampling until the hip-hop artists started getting sued." At that time most labels would give permission for track use and not charge the excessive rates that are required today.

One of the fundamental criteria when looking at sampling is whether its use is "appropriation." "Transformation" has a fairly positive connotation, as it is associated with a long tradition in folk and classical music of modifying melodies of the past while adding new words or chord progressions. "Appropriation" in the legal domain is more negative, closer to stealing. It is an important part however of African American music. "From blues and jazz music to the black folk-preaching tradition that reaches back two centuries... music and words were treated as communal wealth, not private property." (MacLeod and DiCola, 48). Hip-hop artists felt that sounds on records should be available for reuse, like arranging notes for different instruments. Some cases hinged on whether a sample had been transformed to the point that it was something new, in which case it might be covered under the Fair Use exemption to the Copyright Act. If it were merely an appropriation, the repurposing of the sample would be seen rather as creating a derivative work, a right expressly reserved for the copyright holder.

The next determination that is sometimes made is whether the value of the original has been reduced because of the use of a sample. To answer this a number of questions are posed. Has too much been taken? Was the part that was sampled distinctive

enough to be copyrightable? Usually only small samples are taken, so the courts usually concentrate on the qualitative aspects rather than the quantitative ones (Bergman, 2005). However, lawyers for some artists and their labels have claimed that the amount sampled is so small that is should be considered *de minimis*, "too trivial to merit consideration", for example one or two notes or a single chord. In that case a sample would not even be copyrightable.

The test for de minimis would be whether an average audience member would be able to recognize the similarity. The first lawsuit concerning a sample in a sound recording was brought against The Beastie Boys involving a track from their debut album *Licensed to Ill* (1986). The group had sampled less than two seconds of Jimmy Castor's recording of "Yo, Leroy!" on his *The Return of Leroy (Part I)* (1977). The case was settled out of court, as were many sampling cases, since the projected legal fees involved often exceeded the money being sought.

A federal sound copyright was only added in the Sound Recording Act of 1972. Recordings made previously to that date are covered by a collection of state and common laws. The Sound Recording Act mandated that those earlier recordings will enter the public domain in 2067, which is not very helpful for those wanting to use historic recordings in the meantime. When suing for copyright infringement the plaintiff must prove two things, that they are the exclusive owner of a piece of music and that the alleged infringing material is substantially similar to it.

The tradition of incorporating samples was dealt a major blow on December 17, 1991 with the U.S. District Court's decision in *Grand Upright Music v. Warner Brothers Records*. The case involved a song by Biz Markie titled "Alone Again" on his album *I*

Need a Haircut, which was built on a 10-second 8-bar sample from the song "Alone Again (Naturally)" by Gilbert O'Sullivan, published by Grand Upright Music. The sample appropriated a section of O'Sullivan's song that was easily recognizable and formed the musical accompaniment for most of the Biz Markie's rap, whose lawyers tried to defend the action by saying that sampling was a common and established practice in hip-hop, which was true. Judge Duffy, however, dismissed this argument as "totally specious" and decided that Markie had stolen from the original song in order to capitalize on its success. In his decision he noted that Markie's lawyers' had obtained clearances for other samples used on the record, and after trying unsuccessfully to get O'Sullivan's permission had used it anyway. Judge Duffy concluded that the defendant knew a sample clearance was necessary for the song in question, and began his decision with a quotation from Exodus 20:15, intoning "Thou Shalt Not Steal", and was so angered by Markie's "theft" that he referred the case to the U.S. Attorney for the Southern District of New York for criminal prosecution, which was ultimately not pursued. This decision was taken by the hip-hop industry as a clear indication that samples would have to be cleared to avoid litigation. The implications of this on the workflow of music production set in motion the end of sample-based music, one of the chief musical and aesthetic characteristics of Golden Age hip-hop.

While the decision in *Grand Upright Music v. Warner Brothers Records* signaled the beginning of the end of the Golden Age of Hip-Hop, copyright litigation continued to challenge sample-based music for more than a decade. In 1994, 2 Live Crew recorded a parody of Roy Orbison's "Oh Pretty Woman", and in *Campbell v. Acuff-Rose Music* their use of the original's distinctive bass line was deemed a copyright violation. This time the

U.S. Supreme Court ruled in favor of the defendant, deciding that the song was protected under the Fair Use provision. Fair use can be granted for the reporting of news, criticism, scholarship, teaching, and parody. Decisions in Fair Use cases are hard to predict as the court looks at a four factors: the commercial use of the work in question, the nature of the copyrighted work, the amount used in relation to the work as a whole, and the effect the use has on the value of the copyrighted work in the market. Protection under Fair Use is more likely to be granted when the user shows true creative effort and the value of the copyrighted work is not diminished. Since 2 Live Crew's and Orbison's fans were demographically distinct (Orbison's being significantly older than 2 Live Crew's) the judge ruled that this was a case of Fair Use under the parody clause.

In 2003 a case involving the copyright of a composition in a sampling case was brought against The Beastie Boys by James Newton in *Newton v Diamond*. The band had secured permission from ECM Records to use a 6-second 3-note sample of James Newton's flute playing from the album *Choir*, which they looped in their song "Pass The Mic" on the album *Check Your Head*. Newton, however, was also the composer of the song that was sampled sued for the rights to the composition, which had not been licensed. The District Court issued a summary judgment in favor of the Beasties stating that no license was required as the three notes did not warrant copyright protection. Their decision was upheld in the Ninth Circuit Court of Appeals, which accepted testimony that the part used was "a common building block used over and over again by major composers in the 20th Century". The decision in the case was one of the few that showed an understanding of the creative process and supported the defendant's sampling of quantitatively small fragments.

In 2005 the case *Bridgeport Music v. Dimension Films* the court ruled in favor of the plaintiff. It was ruled that any size sample in a sound recording, no matter how small, requires a license. The N.W.A. song "100 Miles and Runnin" included a 3-note guitar riff from "Get Off Your Ass And Jam" by George Clinton and the Funkadelics. The original 2-second fragment was slowed down, thereby lowering its pitch, and repeated to last sixteen beats, creating an effect that was then used five times in the new song. No Limit Films' "I Got The Hook Up" maintained that the sample used in N.W.A.'s song was de minimis and therefore unprotected by copyright law. The first court ruled in favor of the defendant, but the appeals court disagreed, even though no one, even familiar with George Clinton's music would recognize the source without being told which song it was from. The court observed that advances in technology combined with the popularity of hip-hop were making digital sampling common, leading to an increase in copyright disputes and litigation.

The judge noted that a "bright line test" would be helpful in deciding sampling cases, something that had not existed earlier in *Baxter v. MCA*, in which Leslie Baxter asserted that John Williams had copied the theme used to communicate with aliens in *E.T.* from a composition Baxter had written called "Joy". Williams had played piano during a number of recording sessions of the work. Earlier cases such as *Baxter* had acknowledged a threshold for acceptable duplication, in that one or two notes would not be considered infringement. The *Baxter* court added a qualitative approach. A sample, even though short, could be considered copyrightable if it were qualitatively important, that is, if it were distinctive or important to the plaintiff's work. *Bridgeport* rejected the *Newton* court's approach and narrowed the law for sound recordings. The decision

contradicted the established *de minimis* rule with regards to sampling, noting that the exclusive right in the Sound Recording Act of 1971 (written before the practice of sampling began) includes "rearranging, remixing, or otherwise altering the actual sounds. The statue by its own terms precludes the use of a substantial similarity test. Get a license or do not sample. We do not see this stifling creativity in any significant way."

In his decision, perhaps thinking of the decision in *Bright Tunes Music v*.

Harrisong Music (1976) in which George Harrison was found guilty of plagiarizing the melody of the Chiffons' "He's So Fine" in his song "My Sweet Lord", which he later said he may have unconsciously done. The judge concluded "Sampling is never accidental. It is not like the case of a composer who has a melody in his head, perhaps not even realizing that the reason he hears this melody is that it is the work of another he had heard before." The result of *Bridgeport* was a major shift in favor of copyright holders. There would no longer be a *de minimis* doctrine. No sample slice would be too small or too trivial.

It should be noted that Bridgeport Music is a copyright aggregator, which some refer to as a copyright "troll", operating in the musical domain much as patent trolls exist only to sue companies, for which they are blamed for slower progress in industry. In 2001 Bridgeport sued 800 defendants, including five major labels and dozens of independents, alleging acts such as Salt 'n' Pepa and Public Enemy had sampled George Clinton's work without permission, seeking \$150,000 for each of the 500 infringements (Mueller, 2006). Clinton did not even own the rights to his recordings at the time, and has since (unsuccessfully) tried to regain them. Another of Bridgeport's cases was against Sean "Diddy" Combs and his Bad Boy record label in 2007. The case concerned the title

track from Notorious B.I.G.'s 1994 album *Ready To Die*, which included a 5-second sample of the horns on "Singing In The Morning" performed by The Ohio Players. The jury awarded \$733,878 in damages to Bridgeport, and punitive damages of \$3.5 million. The trial judge overturned the extreme award, awarding Bridgeport \$150,000 in statutory damages and \$366,939 in actual damages. The bottom line is that there is now a ticking time bomb of material that was sampled and not cleared in the past.

Speculations

Decisions in cases like *Bridgeport* made labels feel that they had to clear every sample in order to avoid the risk of litigation. It is tempting to try to make a connection between new demands for sample clearance with the end of the Golden Age of hip-hop, and to try to explain the stylistic changes that followed as being a result of that. Perhaps it was time for hip-hop to change anyway, the natural end of a product development cycle that would have happened anyway, like Old School hip-hop giving way in the mid-1980s to the Golden Age. The public may have been ready to shift from the artists located around New York to something new like the gangsta rap scene in Los Angeles. However, even though the tightening of policies around sampling may not have been the only factor and a causal relationship proven between changes in the law and the demise of socially conscious rap, it is commonly recognized that sample-rich textures and creativity that surrounded them were one of the primary distinctions of what made this period be called the "Golden Age" and it seems reasonable that the activity was at least one of the contributing factors to the evolution of hip-hop.

The highlights of the Golden Age of hip-hop are part of our national treasure, a legacy that is beginning to show signs of attracting the respect it deserves as any of the other chapters of jazz, America's classical popular music that is preserved in university music departments such as at the University of North Texas, where degrees in jazz studies have been offered since 1970. We are beginning to see signs of a safe harbor developing for conscious hip-hop, as archives spring up in university libraries and pioneering artists such as Afrika Bombaataa are offered research residencies. Many schools have introduced courses around hip-hop, and in 2012 the University of Arizona launched the nation's first hip-hop concentration in its African Studies area.

If a new system were to be devised to license recordings for samples it seems fair that the musicians who played on the tracks should be included. While James Brown got songwriting income from records that relied heavily on his drummer, Clyde

Stubblefield's work, neither of them currently would receive income were a sampling license to be issued, since the record labels usually own the rights to the recordings. Drew Daniels points out the unfairness of Stubblefield not getting a return from the many records that have incorporated samples of his work: "Western IP law is ethno-centric.

Music from Africa emphasizes rhythm over melody, and sound tends to be viewed as communal property. Chord progressions can't be copyrighted, only lyrics and melodies. "If the copyright laws had been in the hands of blacks of African descent, at least 80 percent would have gone to the creators of the groove, the remaining split between the lyrics and melody." (Schloss, 2004).

The Need for Change

The founding fathers did not intend to make intellectual property equal to physical property. It was supposed to be a limited right designed to "promote the progress of science and useful arts" and give citizens incentives to produce new things. Over the years the courts have tried to strike a balance between the individual's right to prosper from their creations and the benefit to the public. Recent decisions regarding the use of audio samples have moved too far in the direction of compensating publishers and away from public access.

Much of the value of a sample is the result of the listener's reaction. The power of the human brain to match short sections of sound with memories stored there still exceeds the abilities of the most powerful computers. We are immersed in music. Much of what is stored in our memories is not of our choosing but rather what we have been exposed to in public places—in advertising, second hand from what others around us are playing, in advertisements, and while shopping. The value of the recognizability of samples comes from the listener's memory, and the public should get more benefit from the daily incursions into their consciousness that have prepared the necessary conditions to have a listener be able to recognize them and having them "stuck in their heads". There should be a benefit to society from such heavy use of public airwaves and spaces, which could include the right to use samples of copyrighted works in new works. Copyright holders of unrecognized material have less reason to complain about any loss of compensation, since listeners are not aware that its existence and cannot be less likely to buy the original as a result of hearing samples of it.

Recording replays of song grooves instead of sampling the original recording circumvents the need to clear samples, something that Dr. Dre and others increasingly resorted to after the court decisions of the early 1990s. However, minute differences between the original recording and a replay are often enough for the listener to notice, reducing the delight that may be made when the connection between the memorized original and the new context is made.

Musicologist Joanna Demers (2006) has observed that "with the rise of disco, hiphop, and electronic dance music, transformative appropriation has become the most important technique of today's composers and songwriters." Sample-based music draws on the incongruity between the original context and the new musical environment. The listener can find this interesting, as they might when their expectations are denied by unexpected turns in jokes and dreams. Audiences appear more consciously engaged when Greg Gillis (aka Girl Talk) juxtaposes old and new songs than when listening to other DJs playing complete songs. While most people will not recognize the origins of all the clips he plays, the guessing game and occasional recognition of fragments can be an enjoyable experience for many in the audience. Gillis risks legal challenges when doing this work, and others are discouraged from doing the same sort of music by the threat of lawsuits. This type of experience can only be supported by relaxing current regulations. Much of the value of a sample comes from the listener's recognition, which has been developed by having heard the work of origin repeatedly, presumably in situations in which generated revenue for the composers and record label.

Many musicians producing sample-based music are consciously making a statement by invoking history, and an argument can be made that the effective prohibition

of incorporating samples into music caused by the high cost of clearances and bureaucratic bottlenecks interferes with free speech. Hank Schocklee says that "Public Enemy was not just a group that made hip-hop records that people can just dance to. It was also a source of information... What we wanted to create was a kind of 'reality record'" (McLeod and DiCola, 2011).

Putting an end to rampant sampling in hip-hop did not forever solve the problems faced by record labels from the repurposing of their releases. By the mid 1990s a new threat to their profit arrived—Netscape, the first Internet browser, which put in motion more significant changes due to facilitating sharing of digitized audio files. The generation that has grown up since expects information to flow as easily as water from the tap, something that began during their great grandparents' time and is now a feature of every American home. They are bombarded with digital images from televisions, computers, and cell phones, and spend considerable time socializing and watching videos online. The peak in Napster peer-to-peer sharing that happened in 2001 was one of the factors in the cascading drop in CD sales—the perfect storm fueled by students having high speed Internet in their college dormitories, the cost of hard drives falling even as their capacities grew exponentially, combined with the proliferation of mp3 file format and personal music players. The only thing holding back the same sort of pirating of television and movies as happened with illegal music sharing is the size of files and the time it takes to transmit them. Once the next order of magnitude bump in communication bandwidth arrives we can expect producers of moving images to have the same sort of problems as the music industry has had. There will be no stopping the spread of

copyrighted digital media, and the younger generations will expect to be able to copy and paste as they create new content.

In his book *The Gridlock Economy* Michael Heller describes what happens when "too many people own pieces of one thing, cooperation breaks down, wealth disappears, and everybody loses." He gives a wide range of examples—of drugs that could cure diseases that can't be brought to market, U.S. air travel delays, and Irish potato famine. "Cutting-edge art and music are about mashing up and remixing many separately owned bits of culture...Innovation has moved on, but we are stuck with old-style ownership that's easy to fragment and hard to put together" (Heller, 2008). The gridlock of clearing intellectual property is only going to grow as content increases and interconnections between users around the world grow. The same restrictions that musical remixers face are felt in other areas of modern culture. Lawrence Lessig describes situations in the motion picture industry that are reminiscent of the problems faced by sample-based musicians only on a larger financial scale. "The film *Twelve Monkees* was stopped for twenty eight days after its release because an artist claimed a chair in the movie resembled a sketch of a piece of furniture that he had designed. The movie Batman Forever was threatened because the Batmobile drove through an allegedly copyrighted courtyard and the original architect demanded money before the film could be released" (Lessig, 2001). The time is coming when all we can have is a featureless, generic world where the only details are placed there on purpose as product placements. Copyright professor Jessica Litman, a widely known expert on copyright law, would say to an 18year-old artist: "You're totally free to do whatever you want...and then give him a long list of all the things that he couldn't include in his movie because they would not be

cleared. That he would have to pay for them...You're totally free to make a movie in an empty room, with your two friends" (Lessig 2001). A change in copyright law is now twenty years overdue, and should accommodate not just music but all types of media, and not just physical copies.

In an information based society we have both a need and an opportunity to make it easy and efficient to access knowledge and culture. "In a commercialized society, the information industry is able to allow individuals to explore their personalized needs, therefore simplifying the procedure of making decisions for transactions and significantly lowering costs for both the producers and buyers" (Kushwaha 2013). An online database could be created to record copyright information and collect micropayments for the use of samples of new works going forward. It is not clear that the will exists to do this, and the time and expense of going back and cataloging all existing material would be prohibitive. On the other hand, the impact of the infrastructure and growing use of the Internet, which has already been felt as a factor in slowing record sales after peer-to-peer file sharing flourished, will continue to grow in the future and create an irresistible proliferation of media exchange.

The concept of "mechanical licenses", originally intended to compensate composers for copies of songs punched on player piano rolls, will no longer be relevant as users take advantage of the network to access songs whenever and wherever they wish to. We could have a system where copies have metadata embedded in them making it possible to access the history of who played a part in creating it. However, as alternative methods of transmission continue to be developed, it may not always be possible to link to such information. For example, when there are physical copies of a song the liner notes

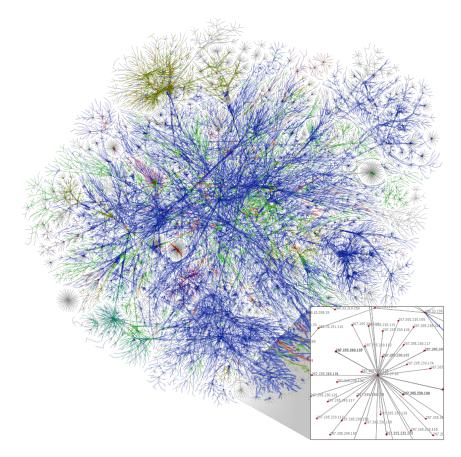
can list the composers, publishers, and performers, and a digital copy could have this data embedded in a header file. But were a video collage be made out of many songs be broadcast on television while an artist is manipulating the broadcast live it may not be possible to carry all the necessary credits with it. As media is used and reused the historical tail would become unwieldy.

The technology of networks and sharing of digital media is the force that is now driving the need to reform copyright. We have entered a remixing age are not prepared for impending flood of information that an increasingly networked world will float in. It is better to come up with a reasonable compromise that the various stakeholders can accept than continue with policies copyright policies inherited from pre-network days and raise a generation of lawbreakers. The value of YouTube and Google Books are examples where much copyrighted material is displayed to users without immediate compensation. Besides the potential for advertising the work to potential buyers, it provides an extraordinary value for society to learn and develop. Everyone should be willing to give up something in order to have access to such a rich source of information. Society benefits from information freely flowing through its branches, and the potential for snippets of songs made available to a huge number of people as building blocks for future songs is an enormous cultural resource.

Copyright law should move the balance point between society's interests and those of creators the balance point closer to side of society, since the value is so large.

The complexity of connections that make up the Internet and its ability to deliver anything to anyone has changed the landscape of intellectual property forever. As the act

of making a "copy" of a digital artifact has changed, so must the rights in "copyright" be updated.



Visualization of routing paths through a portion of the Internet ³

Options

No one policy will handle all the variety of situations that need to be addressed.

Due to the complexity of the business interests at stake a set of reforms will be needed, as outlined by McLeod and DiCola (2011). One test that could be used is whether the use of

³ Rezonansowy 2013. Opte Project visualization of routing paths through a portion of the Internet < http://commons.wikimedia.org/wiki/File%3AInternet_map_1024_-__transparent.png>

a sample is "substantially similar" to the original. The problem with that is that the criteria for that cannot be clearly defined enough to know with certainty in advance if use would be allowed or not, and would come down to a court's decision. An alternative approach would be to define a *di minimis* threshold below which re-users would not have to worry about clearing samples. McLeod and DiCola propose something on the order of one second or one percent of a work. As the definition of what constitutes a work become more fluid an absolute time as a number of seconds would be the simplest measure.

The Fair Use exception to copyright has also been proposed as a way to legalize sampling. In case of a lawsuit the defense must establish that the sample was used "for purposes such as criticism, comment, news reporting, teaching, scholarship, or research." Unfortunately the guidelines for Fair Use are not clear enough to know in advance if it can be relied upon. The only way to know is to go before a judge. One of the factors in deciding a Fair Use case is how transformative the use is, that the copied material is not "substantially similar." Greg Gillis relies on the principle of Fair Use for his productions as the artist Girl Talk. Gillis combined over 300 samples in his *Feed The Animals* CD, and does not ask permission from record companies or pay license fees. Philo Farnsworth, whose label released Gillis' albums, believes that copyright holders of the sound recording licenses for the samples used on his records have not sued because "No one knows which side might win....If a case weighed in our favor, it would open the door for a multitude of artists to feel more comfortable about sampling without permission." Gillis' music would be a strong case since the excerpts he takes are short, and the way he mashes up large numbers of them together makes unlikely that the audience would be confused between his mashups and the originals, so the sales of those records should not

be affected. There is still a risk, however, and some artists and labels are not going to release mashups. Entertainment attorney Whitney Broussard says "You really can't rely on that for business purposes...Some companies do that, but for larger companies that are big targets for lawsuits, it's rare that they would do that" (McLeod and DiCola, 2011).

The most frequently proposed solution is a compulsory license with a statutory rate, such as the type mandated for mechanical licenses. The main question then becomes how the rate should be set. For a mechanical license the duration of the new work is the deciding factor, and that can be clearly determined simply by looking at how long it is. Most proponents of a compulsory license for sampling recorded works agree that the rate for sampling should be determined by a number of factors, but it is not clear who will make the evaluations, and when will they be made. If the rates for samples are not worked out in advance the creative process will be impeded to the point that it can't reasonably be expected to move forward. If the rates are not determined until after a work is completed then they may turn out to be unexpectedly high. There is no agency that could afford to determine the rate for every possible sample in advance, and the determination could always be challenged in court, adding to the risk of lawsuits that the re-using artist could face.

The list of factors that would go into the calculation of a compulsory rate for sampling can quickly grow, beginning with how long the original work is, how long the sample is, and how many times it is heard in the new work. The number of times a sample is "heard" could be qualified: how many times is it heard *prominently*? There are many more qualitative factors, such as whether it comes from the verse or chorus, and if the sampled and sampling musicians are on a major label or not. More subjective are

questions such as how important the sample is to the original and to the reuse, how popular the respective musicians are, what the commercial potential of the re-use is, and how recognizable it is the original and in the new context. Trained musicologists and experts in popular music might reasonably disagree on such determinations, and different genres would call for different experts. Such a multi-dimensional formula could not be programmed into a computer with today's technology, and the time and expense involved in humans performing the evaluation would add cost and time to the process, adding friction to the creative process.

Proposal

There seems to be some agreement that the fees for compulsory sampling licenses would need to vary, depending on many factors such as the importance of the sample to the original work, its recognizeability, and how prominent it is in the new work. If this work is not done in advance the producer of the new work cannot function because of the time delay between conceiving of the idea of using a sample and the answer as to how expensive it would be to use it. Using it first and asking permission later does not work because it may turn out to be too expensive or permission denied. The time and effort required to do this for all samples in advance would be prohibitive.

One option would be to impose a 7-second limit for sampling. This length of time was chosen because of its relation to human memory. It is often given for the length of time of our smallest attention window. It would accommodate two bars of a sample in 4/4 time down to 68 beats per minute, a tempo slow enough to accommodate most songs.

Those that are slower could resort to one-measure samples. Users would be allowed to

appropriate up to 7 seconds from a single work and repeat it and/or transform it as many times as they wish in a new work. A different 7 seconds of the same original work would not be allowed to used in the same new work. A "single work" would be defined as a continuous presentation that could include a series of songs that have been overlapped to create a long piece, like a DJ's set. A 7-second or longer break in the performance would likewise be required to mark the beginning of a new work.

The majority of rights holders will prefer that the status quo be maintained and every sample generate income. For some, even one second would be too much to give away, and seven seconds will sound like a lot. However, if we are going move to a new system we should be generous enough to accommodate a wide variety of uses, not just single shot exclamations, drum hits, or sound effects. We need to make it simple and straightforward to re-use material in order to unleash creative work and let the public benefit from the culture's backlog of recordings.

Concerns will arise as to how this would impact international intellectual property laws. The exporting of American culture and lifestyle is an important part of the U.S. economy. There is no way to confine this to one country, to decree that 7-second samples of works made in the U.S.A. may be used here but not exported to other countries, as the driving force behind this change is the Internet. It seems likely that the net result however would be an increase in consumption of complete works, that if short samples are used more interest will be generated to pay for longer sections.

The music industry will not make such changes voluntarily. The judge in Bridgeport predicted that a system would evolve without government intervention and that over time reasonable fees would be charged. He believed that if one record label demanded an exorbitant rate a potential re-user would go elsewhere and find something cheaper. This has not happened. Voluntary change may be the best solution. While waiting for Congress to change copyright (who may not be able to get things right) and the music industry to come to a compromise perhaps the best that artists can do is to sample works of their friends, or seek out work licensed under Creative Commons. Unfortunately CC licenses are not usually taken out, in part because most people are unaware of the option, and what many re-users would like to work with is not available there.

The only way that music publishers and record labels would let such a change take place would be if they saw it as a way to make more money. Sampling could increase the sale of complete tracks, like it did for some people who engaged in peer-to-peer file sharing. Doing the "right thing" for the benefit of the public is not the priority for corporations, so they can't be expected to open up some amount of sharing in order to increase the flow of interesting art. What could interest them would be bundling this change in sampling with the establishment of a royalty for the performance of sound recordings. This is something they have wished for quite some time. As it is now, composers earn royalties when songs are performed in public, on the radio, or over the Internet, but the holders of the sound recording copyright do not. Perhaps if a system for paying for the performance of complete tracks were created companies would see that as greatly outweighing any possible loss they would have from not being paid for the use of samples. This, however, would raise objections from broadcasters who do not want to pay record companies for broadcasting rights, as they do for songwriters.

The licensing of photographic still images seems to be better regulated than music through the Copyright Clearance Center (www.copyright.com). The licensing of music is more complicated because sound can only happen over the course of time. Finding a way to make the sampling of music convenient and affordable will be a challenge and require compromise from all the stakeholders in the music business. The elephant in the room is the bigger (moving) picture: under what agreement can video be repurposed, especially as it is increasingly interwoven with music? The 7-second rule of royalty-free use might be a reasonable starting point for that discussion as well, for the same reasons as outlined in this proposal.

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Bibliography

2 Live Crew, "Pretty Woman" from *Nasty As They Wanna Be*. Miami: Luke Records, 1989.

Alter, Gaby. "Classic Tracks: Public Enemy's 'Fight the Power.' Mix Online, November 1, 2006. http://mixonline.com/recording/projects/audio public enemys fight/>

The Beastie Boys, "Pass the Mic" from *Check Your Head*. Hollywood: Grand Royal, 1992.

Beastie Boys, Licensed To Ill, New York: Def Jam Recordings, 1986.

The Beastie Boys, *Paul's Boutique*, Hollywood: Beastie Boys Records, 1989.

The Beatles. *The Beatles*. Hollywood: Capitol. 1968.

Bergman, Bryan. "Into the Grey: The Unclear Laws of Digital Sampling". Hastings Communications and Entertainment Law Journal, Spring 2005.

Chic. "Good Times". New York: Atlantic Records, 1979.

Collins, Steve. "Waveform Pirates: Sampling, Piracy and Musical Creativity." The Journal on the Art of Record Production. Issue 3, November 2008 < http://arpjournal.com/680/waveform-pirates-sampling-piracy-and-musical-creativity/>.

The Company Man. "George Clinton Explains Saving Hip Hop Artists on Samples, Recalls Early Days of Dr. Dre, Afrika Bambaataa, Eminem." HipHopDX, January 10, 2012. < http://www.hiphopdx.com/index/news/id.18253/title.george-clinton-explains-saving-hip-hop-artists-on-samples-recalls-early-days-of-dr-dre-afrika-bambaataa-eminem>

Csikszentmihalyi, Mihaly. *Flow: The Psychology Of Optimal Experience*. New York: Harp-Collins, 1990.

De La Soul, 3 Feet High And Rising. New York: Tommy Boy, 1989.

Demers, Joanna. Steal This Music: How Intellectual Property Law Affects Musical Creativity. Durham, London: Duke University Press, 2006.

DiCola, Peter. "An Economic Model of Sampling, Cover Versions, and Musical Collage". The Law and Economics of Intellectual Property Workshop. University of Michigan, February 9, 2006.

http://www.law.umich.edu/centersandprograms/lawandeconomics/workshops/Documents/winter2006/dicola.pdf

Funkadelic. "Get Off Your Ass And Jam" off *Let's Take It To The Stage*. Detroit: Westbound, 1975.

Harrison, George. "My Sweet Lord" off *All Things Must Pass*. London: Apple, 1970.

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

Jay-Z. The Black Album. New York: Roc-A-Fella, 2003.

Jay-Z. "Takeover" from *Blueprint*. New York: Roc-A-Fella Records, 2001.

Kushwaha, D.S. and Ayaushi Kushwaha. "Applications of Info Communication Technology." International Journal of Mathematics and Computer Research. Vol. 1, Issue 10, Nov 2013, 262-265. http://ijmer.in/v1-i10/3%20ijmer.pdf

Lessig, Lawrence. The Future of Ideas: The Fate of the Commons in a Connected World. New York: Random House, 2001.

Lessig, Lawrence. Remix: Making Art and Commerce Thrive in the Hybrid Economy. New York: The Penguin Press, 2008.

Litman, Jessica, *Digital* Copyright. Amherst: Prometheus Books, 2001.

Markie, Biz, I Need A Haircut. New York: Cold Chillin', 1991.

McLeod, Kembrew. "Copyrights and Hp-Hop: Interview with Public Enemy's Chuck D and Hank Shocklee. Stay Free!. No. 20, Fall 2002. http://www.stayfreemagazine.org/archives/20/public enemy.html>

McLeod, Kembrew. Freedom of Expression: overzealous Copyright Bozos and Other Enemies of Creativity. New York: Doubleday, 2005.

McLeod, Kembrew and Peter DiCola. Creative License: The Law and Culture of Digital Sampling. Duke University Press, 2011.

Mueller, Jennifer R. R. "All Mixed Up: Bridgeport Music v. Dimension Films and De Minimis Digital Sampling". Indiana Law Journal, Vol. 81, Issue 1. http://www.repository.law.indiana.edu/ilj/vol81/iss1/

Newton, James. "Choir" from Axum. Munich: ECM, 1981.

No Limit Records. I Got The Hookup. Dimension Films: 1998.

The Notorious B.I.G. *Ready To Die*. Los Angeles: Arista, 1994.

N.W.A. "100 Miles and Runnin". Compton: Ruthless Records, 1990.

Nielson, Erik. "Did the Decline of Sampling Cause the Decline of Political Hip Hop?. The Atlantic, September 18, 2013. <

http://www.theatlantic.com/entertainment/archive/2013/09/did-the-decline-of-sampling-cause-the-decline-of-political-hip-hop/279791/>

The Ohio Players. "Singing In The Morning" off *Pain*. Detroit: JayZWestbound, 1972.

Orbison, Roy and Bill Dees. "Pretty Woman". London: Monument, 1964.

O'Sullivan, Gilbert. "Alone Again" on *Back To Front*. London: MAM Records, 1972.

Pettenati, Leslie A. "Moral Rights of Artists in an International Marketplace." 12 Pace Int'l L. Rev. 425 (2000). Available at: http://digitalcommons.pace.edu/pilr/vol12/iss2/8

Public Enemy, Yo! Bum Rush The Show. New York: Def Jam, 1987.

Public Enemy, It Takes A Nation Of Millions To Hold Us Back. New York: Def Jam, 1988.

Public Enemy, Fear Of A Black Planet. New York: Def Jam, 1990.

Rodriguez, William. "Creating a School of Music: a Bronx New Century High School Initiative". Teachers College, Columbia University, 2002.

RTT News. "George Clinton Suing To Keep His Music Accessible To Hip-Hop Artists." January 13, 2012, < http://www.rttnews.com/1797154/george-clinton-suing-to-keep-his-music-accesible-to-hip-hop-artists.aspx

Run-D.M.C. Raising Hell. New York: Arista, 1986.

Schloss, Joseph G. Making Beats: The Art of Sample-Based Hip-Hip. Middletown: Wesleyan University Press, 2004.

The Sugarhill Gang. "Rapper's Delight". New York: Sugar Hill, 1979.

United States Copyright Office. "Federal Copyright Protection for Pre-1972 Recordings: A Report of the Register of Copyrights". December, 2011.

Appendices

Discography

Run-D.M.C.

Run-D.M.C. (1984) Raising Hell (1986)

De La Soul

3 Feet and Rising (1989) De La Soul Is Dead (1991)

A Tribe Called Quest

People's Instinctive Travels and the Paths of Rhythm (1990) The Low End Theory (1991)

Public Enemy

Yo! Bum Rush The Show (1987) It Takes A Nation Of Millions To Hold Us Back (1988) Fear Of A Black Planet (1991)

LL Cool J

Bigger and Deffer (1987) Mama Said Knock You Out (1990)

EPMD

Unfinished Business (1989) Business Never Personal (1992)

Big Daddy Kane

Long Live The Kane (1988) Taste Of Chocolate (1990)

Eric B. & Rakim

Paid In Full (1987) Follow The Leader (1988)

MC Hammer

Let's Get It Started (1988) Please Hammer, Don't Hurt 'Em (1990) Too Legit TO Quit (1991)

N.W.A.

Straight Outta Compton (1988)

Boogie Down Productions

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Criminal Minded (1987)
By All Means Necessary (1988)
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Biz Markie

The Biz Never Sleeps (1989)

Beastie Boys

Licensed To Ill (1986)
Paul's Boutique (1989)
Ill Communication (1994)

Vanilla Ice

To The Extreme (1990) The Predator (1992)

Arrested Development

3 Years, 5 Months & 2 Days in the Life Of... (1992)

Dr Dre

The Chronic (1992)

The Notorius B.I.G.

Ready To Die (1994)

Videography

Franzen, Benjamin. Copyright Criminals. Copyright Criminals, LLC, 2010.

Gaylor, Brett. RIP: A Remix Manifesto. EyeSteelFilm, 2009.

McNeil, Mark and Bryan Younce. *Secondhand Sureshots*. Stones Throw Records, 2010.

Pray, Doug. Scratch. New York: Palm Pictures, 2002.

Internet Resources

Copyright Clearance

Copyright Clearance Center established in 1978, oversees the licensing of photocopy reproduction rights. *{ownership of music more complicated than pictures?}.* www.copyright.com

Sample clearance company in the UK: http://www.sampleclearance.com

Databases speculating on which samples have been used on which records:

www.whosampled.com www.the-breaks.com http://paulsboutique.info/