

funny, because a lot of kids come out for my show, and I might have some CDs for sale, and people didn't even realize that *Night Ripper* [Girl Talk's album from 2006] was out on CD. They thought it was just a download phenomenon that their friends passed to them—which is cool to me. I mean, I just like the music to be distributed any way possible, and that's what has amazed me." Over the course of writing this book, Girl Talk's albums have appeared on all the major online music stores—iTunes, Amazon, eMusic, and Rhapsody—only to be removed and then offered again several times. At the time of this writing, only iTunes does not carry albums by Girl Talk.

Sampling artists respond in multiple ways to expanded copyright protection for samples and more aggressive policing of samples. The musicians can, for example, use fewer samples, smaller samples, or sample more sparingly; use substitutes for expensive or difficult-to-clear samples; use replays; sample but try to evade enforcement; change business models, perhaps to a noncommercial or underground model; or simply stop sampling. But for all musicians who sample, the changing legal and business environment has altered the creative process and the constraints on that process.

ALBUMS YOU CAN'T (OR DON'T) MAKE ANYMORE

An album like De La Soul's *3 Feet High and Rising*, or Public Enemy's *Fear of a Black Planet*, it's difficult to make it today. It couldn't come out today unless you've got a lot, lot, lot of money to spend on clearing the samples.—RAQUEL CEPEDA

In looking at what happened after hip-hop's golden age, one great point of comparison we can turn to is "Incident at 66.6 FM" and "66.6 Strikes Again" from Public Enemy's album *Fear of a Black Planet* (1990) and their *New Whirl Odor* (2005), respectively. As Chuck D explains: "Incident at 66.6 FM" was actually [made from] a live radio interview that I did at WNBC in New York before a show we did with Run-DMC at Nassau Coliseum. The host of the show was Alan Colmes [the former co-host of Fox News Channel's *Hannity & Colmes*]. Alan said he tried his best to sue us back then, but NBC, who owned the broadcast, felt it would be a waste of time." The track cuts up the interview, and although it is an interstitial piece it is one of the album's highlights be-

cause it showcases the ingenious ways that Public Enemy remixed the media in order to comment on it. It has a strong case for fair use, but when they went back to the original source material for the track from 2005, the clearance culture got to Chuck D. “This time we got permission from Alan and gave him song credits.”¹²

And there are also many instances when ideas for sampling never leave the drawing board. As Tom Silverman says, “We had great ideas about doing songs that never even went to completion because we knew we wouldn’t be able to clear the samples.” As we quoted Posdnuos saying in chapter 1, Silverman’s Tommy Boy Records gave De La Soul “a list of people *not to touch*.” The problems for De La Soul’s music went beyond a mere list of forbidden samples. Danny Rubin used the group as an example of one whose method of music making is now impractical. “I mean, the one thing that comes to my head is that De La Soul used, like, sometimes ten or twenty samples in a song,” Rubin says, alluding to the problem of royalty stacking. “Today it’s cost-prohibitive to put even two—or more than two—samples in a song.”

We discussed earlier how Public Enemy’s original approach to crafting their tracks has also become impractical, and we now want to return to this assertion and back it up with numbers. As DJ Spooky tells us, “What happened to Public Enemy in the late eighties and early nineties is they had to change their composition strategy, mainly because of the impact their records had on the music industry itself.” As the hip-hop scholar Joe Schloss elaborates, “Public Enemy’s album had tons of samples on it. They were done at a time where people didn’t know about sample laws, but it seems to me that, legally, you couldn’t make Public Enemy’s *It Takes A Nation of Millions To Hold Us Back* now, because the sample clearances would cost so much more than you could ever hope to make on any album.”

Some in the music industry, however, deny this oft-repeated assertion. One skeptic is Dean Garfield from the MPAA (formerly of the RIAA), whose doubts we quoted in chapter 1. The debate over whether we have “lost” certain albums because of the sample clearance system partly turns on how much alteration one believes that a musician’s work can or should withstand. With options like replays or substitute samples available, sampling musicians have some flexibility in their compositional or recording choices. But given today’s relative dearth of some types of collage-based music in the mainstream market, perhaps

that flexibility is not always sufficient, at least not for a certain type of creativity.

One of our aims in our work was to evaluate the pervasive claim that certain sample-heavy hip-hop albums from the late 1980s and early 1990s have become impractical to make, or at least impractical to release commercially. To do this, we decided to take two prominent examples—Public Enemy’s *Fear of a Black Planet* (1990) and the Beastie Boys’ *Paul’s Boutique* (1989)—and calculate the hypothetical cost of licensing those albums under the sample clearance regime of today. Our basic method was to collect a list of the samples used in those two albums, estimate how much it would cost to license both the sound recording and the musical composition in each of the samples, and then add up the totals to get a ballpark figure of the hypothetical licensing cost.

Data Collected on Samples Used

We collected a list of identifiable samples used in each song for each of the two hip-hop records we studied. To accomplish this, we used for both albums an Internet database for samples called the “The Breaks,” the albums’ Wikipedia entries, our interviews with artists, and our own musical knowledge.¹³ With *Paul’s Boutique*, we had the additional benefit of a website solely devoted to identifying samples and lyrical references in that album.¹⁴ In most cases, all of the sources either confirmed or supplemented the other ones. In just a few cases (fewer than five), we had to resolve conflicts between sources. In general, we gave credence to the specialized *Paul’s Boutique* website over “The Breaks,” and to “The Breaks” over Wikipedia.

For each sample, we obtained the sampled artist, the sampled song, and the record label of original release. We conducted additional research to determine whether a record label was a major one or an independent. When we lacked information about the publishers of the musical compositions in the sampled songs, we made an assumption that the publisher had a similar stature to the record label in order to place it on the scale from major to independent. We also had some information about how much or what part of the sampled song was used. For the songs on *Paul’s Boutique*, we had accounts of how prominently or how often the sample figured into the sampling work—thanks to the specialized website devoted to that album. We had less information about

how the songs on *Fear of a Black Planet* used particular samples, partly due to the Bomb Squad's unique wall-of-sound production method that often masked the original source material.

Estimating Licensing Costs

As we discussed in chapter 5, a long list of factors determines the eventual licensing fee that the sampling side and the sampled side negotiate. The list has two parts: factors pertaining to the sampled song and the sampled musician's characteristics, and factors pertaining to the sampling song and the sampling musician's characteristics. The music lawyer Whitney Broussard summarizes the role of these factors into a two-dimensional table (see table 2), which we have updated with his generous assistance and also expanded slightly. Creating the table requires summarizing a host of complex qualitative and subjective factors into a scale from low to high.

The rows in the table reflect how the sampled song was used and the sampled musician's attributes, ranging from a "low" profile to a "high" one. We added the categories "famous" and "superstar" to reflect the great expense of sampling the works of musicians like the Beatles or Led Zeppelin. The columns in the table reflect the way that the sample is used in the new song and the sampling musician's attributes, ranging from "small" to "moderate" and finally to "extensive."

Using the data we collected from the websites described above, we classified each sample along the two scales used in the table.¹⁵ First, we put each sampled song into one of the five categories from "low" to "superstar," as reflected in the rows of the table. We usually focused on a subset of the factors that would be considered in a real-world negotiation (making an admittedly imperfect assessment of those factors). We focused most on the length of the sample, the qualitative importance of the sampled portion in the sampled song, whether the sampled musician was on a major label as opposed to an independent one, and the sampled musician's level of fame. An example would be our categorization of the Beastie Boys' sample of Curtis Mayfield's "Superfly" in the song "Eggman" on *Paul's Boutique*. Mayfield's song is a well-known popular track, but it was released on his own independent record label, Curtom Records.¹⁶ On balance, we placed this song in the "high" row of the table.

TABLE 2. The cost matrix for sample licenses

		Use in the sampling work		
		Small	Moderate	Extensive
Profile of the sampled work	Low	SR: \$0 to \$500	SR: \$2,500 or \$0.01/copy	SR: \$5,000 or \$0.025/copy
		MC: Not infringement	MC: \$4,000 or 10%	MC: 25%
	Medium	SR: \$2,500 or \$0.01/copy	SR: \$5,000 or \$0.025/copy	SR: \$15,000 or \$0.05/ copy
		MC: \$4,000 or 10%	MC: 25%	MC: 40%
	High	SR: \$5,000 or \$0.025/copy	SR: \$15,000 or \$0.05/copy	SR: \$25,000 or \$0.10/copy
MC: 25%		MC: 40%	MC: 50% or co-ownership	
Famous	SR: \$50,000 or \$0.12/copy			
	MC: 100% (assignment)			
Superstar	SR: \$100,000 or \$0.15/copy			
	MC: 100% (assignment)			

Note: “SR” denotes the sound recording copyright in the sampled song; “MC” denotes the musical composition copyright in the sampled song.

Second, we put each sample into one of the three categories from “small” to “extensive,” as reflected in the table’s columns. Again, our data were not rich enough to consider all the factors listed in chapter 5, which include the subjective perceptions of sampled musicians about how the sample from their song is used in the new sample-based song. We focused most on the approximate length and prominence of the sample in the sampling song. For example, because the Curtis Mayfield sample provides the bass line for “Eggman”—an important part of the song but not the lead melody or vocal—we placed it in the “moderate” column of the table.

For samples that went into the “famous” or “superstar” row, how the sample is used is irrelevant. That is, for samples of prominent artists, the column classification does not matter because the sampler will pay the same licensing fee either way. Because we had less information about how the samples were used in *Fear of a Black Planet* than we had for *Paul’s Boutique*, we picked the “moderate” column as a default for all samples on that album. Because Public Enemy was on a major label (Def Jam/Columbia), the “potential commercial success” and “major versus independent” factors would have meant higher licensing fees and thus worked against them. But the group’s tendency to use many small fragments of songs would have resulted in lower fees and thus

worked in their favor. To reflect these countervailing factors, we chose to make the across-the-board assignment of “moderate.”

Putting each unique sample into one of five sampled-song categories (the rows of table 2) and one of three sampling-song categories (the columns) requires a rough, subjective judgment. We reduced a complicated set of factors—which would sometimes require protracted and detailed negotiations in the real world—into a multiple-choice question with subjective answers. For this reason, we do not purport to describe this quantitative exercise as an exact science. Rather, it is meant to provide an estimate of the scale of the impediments to licensing sample-based works in the collage style (with multiple samples per track).

After deciding the row and column to which each sample belonged, we could assign a licensing fee. We used the numbers in table 2, which reflect the licensing fee that a sampler would pay at the time of this writing. We did this to simulate how the contemporary music industry would handle these two albums from sampling’s golden age of the late 1980s and early 1990s. We assumed that licenses in every box took the form of a royalty rate (for the sound recording copyright) or a percentage share (for the musical composition copyright). For example, we categorized the Beastie Boys’ sample of Curtis Mayfield’s “Superfly” in the “high” row and the “moderate” column. Thus, looking to table 2, we estimated that licensing the sound recording would require paying a royalty rate of \$0.05 per copy to the copyright owner and that licensing the musical composition would require giving the copyright owner a 40 percent share.

For samples in the “low” row and the “small” column, we assumed a licensing fee of zero. This corresponds to a copyright owner granting permission without charge. It would also represent situations in which use of the sample did not infringe either of the copyrights in the sampled song (e.g., because the use was *de minimis* or constituted fair use). Once we had assigned a licensing fee to each sample contained in *Fear of a Black Planet* and *Paul’s Boutique*, we added up the licensing fees by track. We added the royalty rates paid to sound recording copyright holders separately from the percentages paid to musical composition copyright holders, since the two types of music copyrights have separate revenue streams associated with them. Table 3 displays the results for *Fear of a Black Planet* and table 4 displays the results for *Paul’s Boutique*.

TABLE 3. Applying the cost matrix to *Fear of a Black Planet*

Track no.	Track name	Time	Identifiable samples	Costs	
				Sound recording royalty (\$)*	Musical composition share (%)
1	Contract on the World Love Jam	1:44	5	0.20	170
2	Brothers Gonna Work It Out	5:07	8	0.46	365
3	911 Is a Joke	3:17	7	0.32	250
4	Incident at 66.6 FM	1:37	0	0.00	0
5	Welcome to the Terrordome	5:25	9	0.52	435
6	Meet the G That Killed Me	0:44	0	0.00	0
7	Pollywanacraka	3:52	5	0.15	125
8	Anti-Nigger Machine	3:17	12	0.50	435
9	Burn Hollywood Burn	2:47	2	0.13	110
10	Power to the People	3:50	2	0.08	65
11	Who Stole the Soul?	3:49	6	0.48	375
12	Fear of a Black Planet	3:45	4	0.10	85
13	Revolutionary Generation	5:43	6	0.15	135
14	Can't Do Nuttin for Ya Man	2:46	2	0.04	35
15	Reggie Jax	1:35	0	0.00	0
16	Leave This Off Your Fuckin' Charts	2:31	1	0.03	25
17	B Side Wins Again	3:45	1	0.03	25
18	War at 33 1/3	2:07	0	0.00	0
19	Final Count of the Collision Between Us and the Damned	0:48	0	0.00	0
20	Fight the Power	4:42	11	0.60	485
		TOTAL	81	3.73	3120
Retail price of a CD					\$18.98
Public Enemy's share of revenue per CD					
Recording artist's royalty					\$1.19
Musical composer's royalty					\$0.91
Sample licensing fees per CD					
Royalties due to SR copyright holders					-\$3.73
Royalties due to MC copyright holders (3120% share x \$0.091)					-\$2.84
Net loss per CD (Revenue minus licensing fees)					-\$4.47
Estimated transaction costs (\$500 per clearance x 162 clearances; i.e., two per sample for 81 samples)					\$81,000
Estimated sales of <i>Fear of a Black Planet</i>					\$1,500,000
Artist's estimated total losses from releasing record					-\$6,786,000

*Note: Figures in the table have been rounded to the nearest cent. Exact figures were used to calculate the totals in the bottom row.

TABLE 4. Applying the cost matrix to *Paul's Boutique*

Track no.	Track name	Time	Identifiable samples	Costs	
				Sound recording royalty (\$)	Musical composition share (%)
1	To All the Girls	1:29	1	0.03	25
2	Shake Your Rump	3:19	15	0.68	555
3	Johnny Ryall	3:00	8	0.46	340
4	Eggman	2:57	12	0.40	345
5	High Plains Drifter	4:13	6	0.39	275
6	Sounds of Science	3:11	9	0.93	650
7	3-Minute Rule	3:39	4	0.25	205
8	Hey Ladies	3:47	19	0.54	470
9	5-Piece Chicken Dinner	0:23	1	0.10	50
10	Looking Down the Barrel of a Gun	3:28	4	0.24	175
11	Car Thief	3:39	6	0.31	240
12	What Comes Around	3:07	4	0.29	185
13	Shadrach	4:07	9	0.29	215
14	Ask for Janice	0:11	0	0.00	0
15	B-Boy Bouillabaisse	12:33	–	–	–
15-a	a. 59 Chrystie Street	–	8	0.33	255
15-b	b. Get on the Mic	–	1	0.03	25
15-c	c. Stop That Train	–	2	0.03	25
15-d	d. Year and a Day	–	4	0.20	145
15-e	e. Hello Brooklyn	–	1	0.12	100
15-f	f. Dropping Names	–	5	0.14	125
15-g	g. Lay It on Me	–	1	0.05	40
15-h	h. Mike on the Mic	–	2	0.04	35
15-i	i. A.W.O.L.	–	3	0.14	85
		TOTAL	125	5.92	4565
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Retail price of a CD					\$18.98
Beastie Boys' share of revenue per CD					
Recording artist's royalty					\$1.19
Musical composer's royalty					\$0.91
Sample licensing fees per CD					
Royalties due to SR copyright holders					–\$5.92
Royalties due to MCcopyright holders (4565% share x \$0.091)					–\$4.15
Net loss per CD (revenue minus licensing fees)					–\$7.87
Estimated transaction costs (\$500 per clearance x 250 clearances; i.e., two per sample for 125 samples)					\$125,000
Estimated sales of <i>Paul's Boutique</i>					2.5 million
Artist's estimated total losses from releasing record					–\$19,800,000

Note: Figures in the table have been rounded to the nearest cent. Exact figures were used to calculate the totals in the bottom row.

Next, we added up the licensing fees across all tracks. This gives us the per-copy licensing costs. To turn the royalty share for musical composition copyrights into dollars, we multiplied by the statutory rate of \$0.091—that is, the current rate for mechanical royalties set by the federal government.¹⁷ This rate effectively determines the maximum that record labels will pay out to license the musical composition(s) used in one song.¹⁸

Finally, we used the number of copies sold of each album to estimate the total licensing fees that would be paid today. We also estimate the transaction costs by multiplying \$500 (which is the usual fee charged by the sample clearance professional Danny Rubin) by the minimum number of clearances that would be necessary—two clearances per sample, one for the composition and one for the recording. This is a conservative estimate because it assumes that all negotiations go smoothly and that no copyrights have been divided in a way that requires negotiating with multiple owners for a single clearance. A more complete account of the transaction costs would include monetary amounts representing time spent, delays in the release of the albums, and so on, but we sought only a rough estimate. Adding the total estimated licensing fees and the estimated transaction costs gives us an estimate of the total licensing cost per each copy sold. This calculation represents our attempt to estimate what these albums would cost to license today.

Revenue from Album Sales

Public Enemy and the Beastie Boys would each—in our hypothetical exercise—sell their albums for a typical retail price of \$18.98. We estimate that as the recording artists they would receive a royalty of \$1.19 on each copy sold. This represents approximately 6 percent of the retail price. It is an approximation based on what the groups would receive from their record labels after paying their producers, accounting for the various deductions in major-label contracts, and so on.

In addition, because Public Enemy and the Beastie Boys wrote or co-wrote some of the songs, the label would pay the statutory rate of \$0.091 per composition used—up to a limit. Recording contracts limit how much record labels will pay for the musical composition copyrights implicated by the albums they sell. Record labels will only pay mechanical royalties on a fixed number of compositions—usually ten

to twelve—no matter how many tracks are on the album. For example, even if an album includes fifteen songs, the record label would pay a maximum of the statutory rate of \$0.091 multiplied by ten compositions, for a total of \$0.91. Under this clause, the artist is held responsible for any excess money owed to the copyright owners of compositions that the artist has covered or sampled.

Thus, record-label contracts exacerbate the problem of paying the musical composition royalty shares on songs that sample multiple existing songs. Artists who give up percentages of publishing as a condition of receiving licenses must pay all those committed amounts on every copy sold out of their own diminished royalties. We assumed that each group had a clause limiting the record labels to paying for ten compositions per album. Public Enemy had twenty tracks on *Fear of a Black Planet*, and the Beastie Boys had fifteen tracks on *Paul's Boutique*.¹⁹ Both albums hit the limit of \$0.91, regardless of whether we take into account further recording-contract complications like controlled composition clauses.²⁰ This further limits the licensing revenue available to pay musical composition copyright holders.

Results, Caveats, and Conclusions

In the case of the two records examined here, the artists pay out more than they receive. Neither album would be commercially practical to release. Each artist, having licensed away more royalties and more publishing than the amount that they would receive on each track of the album, *would go further into debt with every copy sold to the public*. The prices for all of the samples—multiple samples on each track—simply exceed the artist's piece of the recording-revenue pie. Public Enemy would lose an estimated \$4.47 per copy sold. The Beastie Boys would lose an estimated \$7.87 per copy sold. The total amount of debt incurred for releasing these albums, according to our estimates, would be almost \$6.8 million for Public Enemy and would be \$19.8 million for the Beastie Boys.

Our estimates of the licensing costs may be lower than what they probably would have been in reality, for three main reasons. First, we have only used easily identifiable samples—those named by devoted fans who contribute to Internet sites, or those identified by the authors of *Creative License*. However, especially on the Public Enemy album, it

is possible that dozens more tiny samples were used that we could not identify. (Public Enemy members told us that, for instance, there are definitely more than eleven samples in their song “Fight the Power.”) Second, we have assumed that all sampled artists were contacted *before* the album’s release to achieve the lowest fee possible. (In other words, the licensing fees in table 2 are based on licensing that occurs before the sample-based record hits retail stores.) Third, we have assumed a minimum of transaction costs by simply applying a \$500 fee per license as might be charged by a sample clearance house rather than factoring in all the costs incurred when copyright holders are difficult to find, when they “hold out,” and so on. All of these factors tend to push our estimates of the licensing cost for these two albums lower than the actual clearance costs would be today.

Some upward biases exist, too. Although we assumed that samples in the “low” row and “small” column of table 2 would carry no licensing fee, we also assumed that every other sample would require a license that carried a fee. Yet some of the artists who sample might have granted permission without a fee. Next, we assumed that licensing fees were rigid, regardless of how many other samples were being used in the same Public Enemy or Beastie Boys song. Some copyright owners might agree to a lower-than-usual fee. Finally, we assumed ongoing royalties would be paid, not one-time buyouts.

Other limitations of our methodology could push our estimates upward or downward. We assumed that the groups would be selling CDs rather than downloads, which would alter both the retail price and the groups’ share of the sales revenue. As we mentioned above, putting each sample into one of the eleven boxes in table 2 is not an exact science. We have oversimplified a complex negotiating process, which could make estimates inaccurate in either direction—that is, our method renders our estimates imprecise. In addition, the hypothetical exercise left out the issue of refusals to grant permission or a license. Many of the samples involved in these two albums might never be cleared: the Beatles, Led Zeppelin, Pink Floyd, the Eagles, and Prince might all have said “no”—as they typically do. In that case, Public Enemy or the Beastie Boys would either have to drop the samples in question, alter the song, or risk litigation. Dropping a sample saves money on licensing fees, but altering a song can be expensive (studio time, remastering costs, and other such things). Differences in various tracks could

reduce the value of the album to consumers or reduce the aesthetic value of the work. On the whole, it is difficult to say whether refusals to license would increase the cost of attempting to release these two albums commercially today.

Our approach does not achieve a perfect simulation, but it does give us a sense of the scale of the licensing costs for *Fear of a Black Planet* and *Paul's Boutique* if they were released, as is, today. Despite all of our caveats, tables 3 and 4 provide some concrete information. The sheer number of samples alone would make licensing these albums very difficult, to put it mildly. We do not pretend to have hit upon the exact licensing costs; instead, we hope to bring the challenge of licensing collage-style sample-based works into higher relief. Today, releasing such albums commercially would probably result in losing money with every copy. Even if our estimates for *Fear of a Black Planet* are twice as high as the real licensing costs, and even if our estimates for *Paul's Boutique* are three times too high, the groups would fall further into debt every time they sold an album. (And remember, there are good reasons to think our estimates are too low.) From this analysis, we conclude that various aspects of the licensing system—law, business practices, costs—have made at least some forms of musical collage totally impractical.

ASSESSING THE SAMPLE CLEARANCE SYSTEM

There is no reason why it has to be like that for artists to get paid.

We ought to be focusing on ways to assure creativity while also making sure artists get paid for their work.—LAWRENCE LESSIG

How do our interviewees evaluate whether sample licensing works as well as it should? Some focus on the efficiency of the system—whether every licensing negotiation that should happen (that is, those that would benefit copyright holders, would-be licensees, and the public) does happen. This perspective focuses on the friction in the system—namely, transaction costs. “My criticism, I guess, comes with the process,” says Bill Stafford. “I think that there should be some way of streamlining it. It shouldn’t take eight months to clear something. I think that there needs to be something better.” Our findings in chapter 5 describe how a sample licensing negotiation can cost dearly, experience delays, or