"The Sound of the Underground": Distinguishing Alternative Identity in Rap's Contemporary Moment

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“The Sound of the Underground”:
Distinguishing Alternative Identity in Rap’s Contemporary Moment
by
Jacob P. Cupps

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ABSTRACT OF THE THESIS

“The Sound of the Underground”:
Distinguishing Alternative Identity in Rap’s Contemporary Moment

by

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Paul Steinbeck, Chair

This thesis focuses on transcribing and analyzing a repertory of underground rap songs, examining how the quality of undergroundness manifests within beats and flows. I define underground as a subgenre of hip-hop that is unified by a culture of meditative listening, and I opt for it over related terms because it is style agnostic. Therefore, I am able to investigate how a small set of techniques manifest across a variety of approaches to making underground hip-hop. I argue that these are a way of sounding the underground, communicating meaning to the listener at the level of the song.

After an introductory Chapter 1, the subsequent chapters examine techniques used in underground production and underground emceeing respectively. Chapter 2 argues that producers employ techniques I term resampling/recomposing, choking, glitching, and slipping to create beats that use non-standard song forms and prioritize an aesthetic of internal variety and contrast; this heterogeneous sound promotes producers to co-authors in the construction of musical identity. Chapter 3 posits that emcees use techniques I term pivot rhyme, closing fragmentation, mimesis, and processing to engage listener’s expectations and challenge the perception that flow is the most hierarchically significant element in a rap song. This demonstrates an emcee’s reciprocity in the construction of their own identity, inviting listeners to deeply engage with how the music informs the resulting musical persona.
Chapter 1:
Locating the Underground in Styles, Histories, and Practices

“Listening correctly can cause introspecting.”
R.A.P. Ferreira

1.1 Open Mike Eagle and Nocando’s “Unapologetic”

Before landing several projects on best-of-the-2010s lists from outlets like Pitchfork, Brooklyn Vegan, and Hip-Hop Golden Age, the Los Angeles based rapper Open Mike Eagle started off the decade with a declaration. His first studio LP, Unapologetic Art Rap (2010), coined the subgenre art rap, which Eagle calls “a shorthand for leftfield and avant-garde rap music” that he “has spent his career redefining and expanding.”¹ And not just Eagle himself, but so too American hip-hop fandom and criticism around him: in 2020, the former Editor-in-Chief of Rap Genius Shawn Setaro claimed that: “[art rap] is a movement that has become one of the most vital things happening in hip-hop today…in a way that recalls

¹ Open Mike Eagle, “About,” http://mikeeagle.net/aboutme/.
the innovations that took place in rap’s golden age, without aping that era’s sonics.”

If Setaro’s claim holds merit, we should interrogate how the music being received as art rap comes to be known in that way—not just in its idiomatic “sonics” but also its themes, techniques, and approaches. Max Bell attempted this by digging through Bandcamp’s art rap genre tag for Bandcamp Daily. After purporting that it “is antithetical to terrestrial radio station playlists,” he notes a few unifying stylistic traits “including but not limited to left-field, forward thinking production, unconventional song structures and cadences, songs written from the perspectives of fictional characters, explicit and protracted engagement with social and political issues, and absurdist metaphors and similes.” Bell’s attempt at a definition is somewhat helpful, but its breadth offers only a partial picture, especially due to the qualifications it must make. It seems, more than a decade later, the hip-hop community is still asking the question posed by the seventh track on Eagle’s Unapologetic Art Rap: “WTF is Art Rap?”

Eagle and the guest emcee Nocando offer a glimpse at a definition within the lyrical content of the eighth track on the LP, “Unapologetic.” As art-rappers, Nocando claims that the two are small-time enough to identify with an underground scene:

I’m underground, man, like I’m beneath the streets,
I dress nice but I ain’t no goddamned sneaker freak.

At the same time, the two have more cachet than the “rapper friends” of the local “scenesters”:

Now everybody’s got a rapper friend,

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4. Bell mentions that Kendrick Lamar’s work, both commercially successful and radio friendly, still “pushes the boundary of rap.” After listing the sonic qualities he identified, he also states that “labelling a song/album ‘art rap’ doesn’t mean that it’s only that.”
But my name’s higher on the flyer,
There’s a reason I’m performing after him.

On Eagle’s end, he envisions art rap as dedicated to a particular audience:

This to all the adolescent negro lads,
Who make sketches and daydream the whole class.
In ‘96, they would have been De La Soul Fans,
(In 2010), it’s My Chemical Romance.

However, he is troubled by a whiter (and perhaps less-initiated) audience his art rap parties have attracted:

Scene’s built on the backs of black rappers,
(Somehow) when I’m asking for cash you can’t answer.
Descendants of the folks that shackled my ancestors,
Came to watch us battle and cackle like Fran Drescher.

Although keeping his own financial success in mind, Eagle condemns another lucrative type of rap music that sells itself over to the entertainment industry:

Cause my little brother never heard of Little Brother . . .
The only [rappers] he can discover
Are the ones who please Viacom’s executive n—— lovers.

Even from a brief lyrical analysis, “Unapologetic” creates a complex picture of the black, masculine identities of the emcees on the track.6 The two communicate these lyrically, but text alone does not construct identity in rap: musical content plays a role as well. This chapter considers “Unapologetic” as an early manifestation of the music the

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6. To say complex here is not to deny that the lyrics of “Unapologetic” contain oversights. One that comes to mind is its misogynistic, hand-waving attitude toward “drunk party girls.” Part of the complexity I note is that Eagle is comfortable holding this attitude while, in the song’s outro, condemning misogyny in the lyrics of Soulja Boy—no doubt one of the rappers he has envisioning a Viacom-friendly rap music.
thesis overall intends to address. Although (as my title suggests) I will eventually come to contextualize the track within a subgenre I call underground, I first consider its relationship to some categories in rap which have received attention in recent music scholarship: namely, Amanda Sewell’s conception of the “nerdcore” subgenre, and Adam Krims and Justin Williams “jazz/bohemian” rap constructions. I reject these designations for “Unapologetic” because the song’s themes and sounds cannot be contextualized within one style, so, instead, I look towards listening practices in hip-hop to create definition of underground that will serve as a guide for the music that this thesis explores.

1.2 “Unapologetic”—Nerdcore or Jazz Rap?

The lyrical content, themes, and sonic palette of “Unapologetic” suggest a number of connections to genres which have been previously theorized in music studies. Its beat and lyrical focus on intelligence place it within a lineage of nerdcore hip-hop, a less commercial type of hip-hop from the 1990s and early 2000s. Additionally, its thematic focus on the artistry of hip-hop suggests a connection to jazz rap of the early-to-mid nineties, which also dealt with similar topics. In this section, I consider whether “Unapologetic” satisfactorily fits within one generic category or the other.

Nerdcore, according to Amanda Sewell, “happens when technologically savvy, verbally precocious, and socially marginalized people begin to make hip-hop using their skill sets and experiences.” Drawing on discussions with MC Frontalot, a pioneer of nerdcore, she describes a few core elements of the genre. One, more superficially, is lyrical reference: nerdcore rappers often discuss “nerdy” media (sci-fi, fantasy, comics, anime) or “nerdy” career paths (astrophysics, computer engineering, or genetics.) More substantially, nerdcore emcees also rap about the hardships shared by young men who

can not “fit into the traditional expectations of masculinity, especially as a teenager.”

“Unapologetic” thus presents itself as nerdcore by drawing on these topics. Both the track and the LP it is housed on share a grab-bag of references with nerdcore. On Eagle’s liner notes video for “Art Rap Party,” he describes such a party as a space where “of course, it’s gonna be a little nerdy [...] We could talk about anime, [...] political stuff, exploring realms conversationally that aren’t in the typical rap song.” Eagle also positions art rap at the periphery of the genre—in a space where “intelligent folks go to dig on intelligent music.” Eagle includes young black men in this narrative, those who may not identify with scripts for masculinity that are highlighted in more commercial rap. The “adolescent negro lads” Eagle dedicates “Unapologetic” to are inclined to “rebellin’ since it’s the first sign of intelligence,” and his similarly intelligent music may speak to that.

One final element of “Unapologetic” reaches my ear as nerdcore although it is not articulated in Sewell’s definition. The primary harmonic content of its beat is constructed from a bitcrushed synthesizer, outlining diatonic harmony in G major. Along with the two-bar drum loop, it does not create a complex musical texture, but it does create one that carries meaning for the listener. More superficially, the timbre evokes some connection to video game (a stereotypical nerdy past time) soundtracks from the 1980s, 1990s, and early 2000s, which frequently feature eight-bit soundtracks. Additionally, I believe the changes in timbre between the two loops (e.g., 0:00–0:04 and 0:51–1:01) ask listeners to engage with the producer as “technologically savvy,” as someone with enough knowledge of a Digital Audio Workstation (DAW) that they can track in and manipulate these synth sounds throughout the beat.

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10. Eagle.
Nerdcore helps contextualize notions of intelligence and timbres used on “Unapologetic,” but it does not account for the track in totality, especially because nerdcore is “almost all white, middle-class, and [suburban].” Although “Unapologetic” may be rapped by emcees with nerdy proclivities, the track communicates more about their identities than this. Taking them at their work, Eagle and Nocando are not just outsiders due to their nerdiness but also because they are artists, working on the outskirts of the rap landscape. In this way, “Unapologetic” reflects ideologies that helped to construct the ethos of jazz rap (or bohemian rap) that emerged during hip-hop’s golden age.

Krims developed his genre system for rap music by examining a number of distinct subcategories present in the rap music industry by 1994. In particular, he cites two—in his parlance, jazz/bohemian rap and reality rap—that articulated themselves as alternatives to gangsta rap, a style that was closely aligned with the commercial mainstream. In the case of the former, jazz became a sonic profile closely associated with alternative identity: A Tribe Called Quest, Digable Planets, and The Roots all used jazz, either via sampling or performed live, as a sonic marker of this style.

Williams heightens the connection between jazz and artistry in mid-nineties hip-hop. He argues that the above groups used jazz and other black sonic profiles as a method of constructing their music as a high art taken with respect to the industry. They drew on certain musical elements that functioned as jazz codes: signifiers in the instrumentation that reach audiences as having a jazz feel, even if their sound source is not a jazz record specifically. That contemporaneous audiences appreciated these sounds as art, he argues, was precipitated by two elements: (1) through the efforts of musicians like Wynton

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Marsalis during the 1980s, jazz had become an institutional and “serious” art form, and (2) jazz-rappers coupled these sonic borrowings with lyrical and visual significations of their own alternative identity. Audiences were therefore poised to experience the music as a sort of artistic rap substyle.

Eagle’s art rap operates using a similar discourse, one that suggests “Unapologetic” may be a new type of jazz rap. Although the track does not draw on the same jazz codes mentioned above, many tracks by artists working in a similar vein do; jazz and other black sonic profiles function as a sonic shorthand for alternative identity in the 2010s like they did in the 1990s. Eagle also makes reference to jazz rap when rapping about his audience: he explicitly says, if born a bit earlier, “they would have been De La Soul Fans.” In his estimation, the ideal demographic for art rap overlaps with the fan-base of jazz rap, separated by a generation. Finally, indeed most importantly, art rap reinscribes the same divisions within the rap industry that served as the thematic focus in jazz rap. Eagle’s criticism of the types of artists that “please Viacom’s [executives]” and his estimation of his own work as a “black man’s art” allow him to construct a similar dichotomy between him and popular rappers in his time that A Tribe Called Quest’s Q-Tip did between himself and popular rappers in the 1990s. Both art and jazz rappers make themselves out to be bohemians within the music industry; thus, according to these artists, the listeners who

15. Williams, *Rhymin’ and Stealin’*, 48–52. The directionality of Williams’ claim is important to note here. Jazz-rappers did not use these sounds because they thought of jazz as a serious art form; rather, because of the position jazz held within mainstream American culture and these rappers articulated a mainstream/underground divide textually, he claims jazz *sounded as* art to the hip-hop community.

Another question worth pursuit is how jazz came into these producers’ listening spheres, and how sampling jazz both then and now relates to technology, history, and canonicity. Without some sort of ethnographic inquiry, we can only hypothesize about what jazz meant to jazz-rap’s producers: were these samples coming from family record collections or their own crate-digging? Were they exposed to jazz through institutional learning resulting from jazz’s growing prestige or striking out on their own to discover this music? Williams’ claim is helpful for understanding the reception of this music, but it does not speak to the process of acquisition and creation of the subgenre’s sound.

16. Williams, 55–64.

17. In the appendix, I have collected a few tracks by artists whose music I engage with throughout this project that either sample or interpolate lyrical content from pieces that exhibit jazz codes (see Table A.1.)

18. Williams cites the “new jack swing” movement in R&B as the object of jazz rap’s scorn, and the lyrics Tribe’s emcees devote to discussing it bear some resemblance to Eagle and Nocando’s rapping (see Williams, *Rhymin’ and Stealin’*, 56.)
can appreciate each style are connoisseurs amongst the listening audience of rap music.

As with nerdcore, jazz rap speaks to matters of genre in “Unapologetic” but likewise does not completely explain the track. Even if it shares an ideology with jazz rap, the sonic profile of “Unapologetic” does not fit neatly into the generic category Krims and Williams construct. Granted, each author acknowledges the possibility for a stylistic eclecticism that reaches beyond jazz sonically; however, the groups that receive their focus (A Tribe Called Quest, De La Soul, Digable Planets, Jungle Brothers, and The Roots) all rely to some degree on the sound of jazz in their music. Without jazz codes to signify generic construction, “Unapologetic” cannot reach listeners as jazz rap—at least not by the same methods that golden-age jazz rappers did.

Eagle’s “Unapologetic” and his conception of art rap as a moment at the start of the 2010s articulate something that is at once new in hip-hop while relating to ideas, sounds, and genres from throughout hip-hop’s history. Although the track’s “tech-y” sound and ideas about intelligence intimate some connections to nerdcore, the designation falls short because of nerdcore’s typically white practitioners and lack of concern with being received as art. On the other hand, to situate “Unapologetic” within the lineage of jazz rap does not adequately account for the track’s genre codes but more closely approximates the topical focus of art rap, as well as the positionality it affords itself with respect to the mainstream.

1.3 Hip-Hop Practice and Listening as Meditation

In the previous section, I argue that “Unapologetic” is characterized not by one sonic style like nerdcore or jazz rap. Instead, I argue that the track is characterized by a practice of listening, a type of sonic engagement I will term listening as meditation. Throughout this thesis, I aim to demonstrate that contemporary underground hip-hop is closely associated with this style of engagement, so I will define and historicize it in this section.
Listening as meditation is abundant in all historical stages of the making of any kind of hip-hop—from its conception in the mind of the producer and emcee, to its performance live or in studio, and eventually its reception by the listener. Practitioners throughout hip-hop’s history (including Eagle himself) promote this style of listening, one that engenders a deep immersion in hip-hop as a musical form.

The phrase listening as meditation inverts the mind-body dualism invoked by earlier popular music discourses. To be sure, by privileging listening as a unifying thread amongst a wide variety of stylistic manifestations, I am inviting a tacit definition of the underground as hip-hop to be listened to as distinct from to be danced to or merely heard. Part of the trouble with such a definition is that similar justifications have been levied for excluding music traditions from being objects of critical inquiry. My choice to prioritize discussing this music as an engagement of one’s musical intellect does not exclude its use as dance music, nor as a music that invites other embodied responses. The metaphor of listening as meditation, then, proposes a unification of cognitive and embodied responses that characterize engagement with underground hip-hop. In short, it is an argument that will, in the coming pages, put this chapter’s epigraph to the test.

At each point in hip-hop’s creative processes, and indeed throughout its history as a musical form, several practitioners have evinced that their listening exhibits a meditative engagement with music. The rapper-producer Count Bass D suggests that this style of listening guided his sample selection in the introduction to his 2002 track “Truth to Light”:

Songs that really I like a whole lot, that I’ve liked over the years, kind of run through my head all the time and so they kind of creep into songs. … Unless

19. My focus on listening runs the risk of positioning underground hip-hop as a “transmission of mind–mind messages” between composer and listener (see Suzanne G. Cusick, “Feminist Theory, Music Theory, and the Mind/Body Problem,” Perspectives in New Music 32, no. 1 (1994): 20.) While this style of inquiry still characterizes a great deal of music-theoretical scholarship, my reservations arise from the potential for erasing the embodied experience of performers (who, in this repertory, tend to be the composers as well) and listeners within the exchange that happens in underground hip-hop. I therefore intend with my term for this mode of listening (as meditation) to be interpreted as a unified mind-body practice.
Count focuses on familiarity, being “in the know” with the source material, as a requirement for parsing his dialogue with a previous recording of Nice & Smooth at the beginning of the track, but his discussion also reveals listening norms within hip-hop. First, Count engaged with “Funky for You” regularly enough over a long period of time that his decision to dialogue with the artists’ ad-libs on the original recording felt subliminal and “[crept] into” the track. Second, he expects that his audience will have engaged with the material on a similar level, enough to “know what [he’s] talking about.” Finally, Count conceives of a type of listener, who may not know the source material but, as a result of their familiarity with the listening norms, trusts its meaning will come to them “in time” as they listen further and more broadly beyond “Truth to Light.” Such a listener is the meditative listener, the type of listener Count is and that makes up his listenership.

For the emcee, meditative listening parallels a producer’s engagement; they listen with enough regularity and focus that imitating other artists can become subconscious and in some cases problematic for their own writing process. Eagle explains that, because of his listening interactions with the emcee MF DOOM’s flow, “he has to be careful …because [he] can almost get into [DOOM’s] mind in terms of how he writes.” Eagle characterizes listening to DOOM with such frequency, regularity, and depth that it would be easy for him to write a verse in DOOM’s style that would be more derivative than he would like. Again, the hip-hop practitioner positions their compositional choices as subconscious, based on deep engagement with models for composing that show up in their

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own listening. For Eagle as an emcee, this listening occurred so often that he subsumed DOOM’s style of flow into his own.

Finally, hip-hop practitioners show that listening as meditation informs their interpretation of performances by other practitioners. They envision the artists they interact with as meditative listeners, who then serve as guides for further meditative listening. The Bronx DJ Grand Wizzard Theodore describes, when hearing a record through DJ Kool Herc’s soundsystem, it, “made you appreciate the record even more. He would play [something] that you listened to every day and you would be like ‘Wow, that record has bells in it?’ It’s like you heard instruments in the record that you never thought [it] even had.”

Theodore’s description shows that, even within the context of a block party, hip-hop can be listened to in a way that brings about new depths to the music beyond the standard forms of engagement.

1.4 Definitions and Limitations of Underground

If Eagle’s listening is meditative, and no other style or subgenre accounts for all of the lyrical, thematic, and musical elements in “Unapologetic,” then another term is required to describe the track’s subgeneric construction. Rather than his own art rap, I argue the designation underground is appropriate, for underground hip-hop is typified by this style of meditative listening. Fans of underground hip-hop are encouraged to engage with the subgenre as meditative listeners because underground hip-hop musicians exhibit meditative listening in their music (re-articulating the practice, too, in interviews). As a result of the perceived closeness to the artist that characterizes the underground, listeners choose to engage with the music in a similarly meditative fashion.

Before I arrive at this definition, I need to address three conceptions of the under-

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ground which I believe to be faulty and therefore do not wish to import in it. Specifically, the concept of underground cannot rely on discourses of artistry, authenticity, or commerciality. These three metrics permeate discussions of what makes music underground, so addressing them out front will prove useful in elucidating what I wish to focus on: namely, listening practice and methods of musical construction.

Defining underground as an art genre invokes metrics of a work’s beauty and requires asking questions at once too broad to answer and too based in subjective experience to communicate effectively. Although rappers like Eagle have constructed their personas around artistry, and fans buy into such constructions, I find it telling that such discourses are often short-lived. As early as 2013, Eagle raps:

I used to throw these sensitive parties for art rap,
No regrets, but I was foolish to start that.
Sophisticated fuckers left a bitch of a bar tab,
And now we just throw pizza parties.23

Eagle’s indictment of the art rap scene followed quickly on the heels of his self-identifying as an art-rapper, during a feature verse only a few projects after he unapologetically codified art rap. Though his lyrics focus on the pretension(s) and bourgeois tastes of the fans the term garnered him, I also wonder if writing “artful” rap lost its meaning. As a listener, I find it hard to describe whether something reaches me artfully; for instance, I do not, as Justin Williams suggests, hear a piece based around a jazz sample as more artistic than, say, something constructed from DAW-based synthesizers simply because jazz’s standing in contemporary American culture.24 Rap music’s artistry seems less quantifi-

24. A site of further inquiry into Williams’ claim is extending and problematizing the concept of jazz rap during its 2010s re-emergence. During this era, jazz has not only formed its own canonic tradition, but hip-hop has also formed its own canon of borrowed jazz codes. Moreover, contemporary practitioners of jazz including Kamasi Washington, Terrace Martin, and Thundercat interface with hip-hop not through sampling but instead by performance with hip-hop musicians. Jazz and hip-hop in the contemporary moment
able (and more personally defined) than its undergroundness.

Defining underground as an authentic music proves to be slippery as well. Like narratives of artistry, authenticity finds purchase in popular discourse. This is because artists tie music they deem authentic closely to the early, pre-recorded era of hip-hop. Fab 5 Freddy summarized this mentality when discussing his role as the writer for the 1982 film *Wild Style*. The writers set the story before the 1979 release of Sugarhill Gang’s single “Rapper’s Delight” because “[they] wanted to go back to a few years earlier… *when hip-hop was completely underground, when the form was raw and pure.*”25 His association of undergroundness with rawness or purity illustrates an attitude that listeners, critics, and fans alike share about of hip-hop, yet, once again, I wonder if the terms have any bearing on the sound of a commercialized music form decades later. As I will show in oncoming chapters, underground artists use the recorded medium to communicate their identity to audiences, a necessarily commercialized endeavor. Discourses of authenticity therefore seem to be based on subjective, evaluative judgements a listener makes.

Defining underground strictly as an anti-commercial music may seem valuable intuitively, but modern methods for discovering and participating in cultures of listening problematize such a conception. A lack of commerciality may very well tie to the perceived authenticity of a rap song. However, commercial success is not the only metric considered in undergroundness. As Anthony Kwame Harrison argues in his ethnographic foray into the San Francisco underground hip-hop scene, “the label ‘underground’ can be applied to everything from Grammy-nominated artists like Common and the Roots to groups like The Latter, who once boasted(!) of having sold only two copies of one of their CDs.”26 Harrison’s insight gels with observations by Kegs One, the proprietor of the San

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25. Williams, *Rhymin’ and Stealin’*, 23. Emphasis my own. The release of “Rapper’s Delight” is often thought of as the moment when hip-hop went commercial.

Francisco hip-hop shop Below the Surface. Kegs speaks to degrees of commerciality that exist within the underground:

I have a few different people that are into the more ‘commercial underground’ stuff, but then 95 percent of my customers are here for the literal four-track tapes. You know, dirty-sounding, low-budget, in-the-room, in-the-closet recorded tapes.²⁷

Each point illustrates that several levels of success can all maintain underground as a quality: all the way from The Latter’s two records sold, to the more successful Bay Area artists who are “just below the surface,” on up to musicians like The Roots, who signed to Def Jam in 2006 and have been Jimmy Fallon’s in-house band since 2009. For acts to have varying degrees of success and still be considered underground points to some metric beyond commerciality being invoked to define the quality of undergroundness.

Harrison’s definition of underground comes from an ethos he observes in the Bay Area scene, and his observations support my own definition based in listening practices. In particular, he notes “the idea of a blurring, thinning, almost imperceptible line that separates artists and fans” and “an intimacy of the fan bases [underground artists] tend to attract.”²⁸ Although, like Harrison, I believe this ethos decreases in palpability as an artist’s commercial success and notoriety increases, these artists are still stylistic participants in underground hip-hop because this ethos sounds in the music. I connect this intimacy to the way an underground artist models meditative listening for fans; in effect, the music shows the artist acting as a listener (as a fan themselves), and fans experience a type of intimacy in that recognition.

This perception of intimacy in acts of meditative listening is core to understanding how underground is sounded in hip-hop music. Underground is not codified by one sonic practice, nor by one thematic focus, but rather by a multiplicity of both, guided by mu-

²⁸. Harrison, 10–11.
sicians demonstrating their relation to a network of practices and focuses. Underground hip-hop artists that bring together a multiplicity of experiences in their work model a listening practice for the fan, who may at first intentionally re-navigate these listening networks for themselves or may—in time, as Count Bass D suggests—come to trust that these networks will re-manifest in their own paths of musical experience.

1.5 Outline of the Thesis

Defining the subgenre underground as a practice of meditative listening shared by fans and artists, this thesis focuses on transcribing and analyzing a repertory of underground rap songs, examining how the quality of undergroundness manifests within beats and flows. Avoiding limiting the underground to one sonic style allows me to examine how, despite the stylistic setting, certain techniques communicate meaning to a listener; this proves to be helpful when the lyrics in a song speak less explicitly to identity than “Unapologetic.” In short, I investigate in how musical texts sound the underground, agnostic of any stylistic approach to music making.

My reading of musical texts agentially is bound up in Loren Kajikawa’s notion of *sounding* in rap music. Kajikawa argues that the rap song is a medium for transmitting identities and meaning between the artist and the listener.29 Where his scholarship focuses on the encoding of racial and gender identities, mine will focus on another matter: how an artist navigates mainstream expectations about these identities, and in doing so invites a more meditative engagement with the artist’s particular identity.

The two primary chapters in this project interrogate the overlapping yet distinct methods by which hip-hop musicians sound the underground. Chapter 2 focuses on beatmaking, arguing that producers create underground hip-hop beats by avoiding fixed samples/loops and normative forms. I examine how producers introduce variety primarily

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through digital editing techniques that mimic the live, improvisatory roots of the genre within a broadly repetitive musical texture. My beat transcriptions come in two forms: tabular notation of larger formal sections and standard notation of snapshots of the musical texture. From these transcriptions, I identify four methods of alteration producers use to introduce musical variety: resampling/recomposing, choking, glitching, and slipping. Although the list does not exhaust the methods producers use to sound the underground, it demonstrates how a hip-hop beat functions as a space for co-creation of alternative identity with an emcee.

Chapter 3 examines the underground emcee’s role in identity construction by studying techniques used in flows, or rapped verses. Lyrics occasionally offer information about identity, but this chapter focuses on emcees’ non-textual methods of “[amplifying] and in some cases [transforming] the information that listeners receive” through textual and visual communication. As in my previous chapter, I employ a few styles of transcription to examine different musical elements. When examining flow’s structure—its metrical patterns, rhyme schemes, and linguistic-syntactic units—I use Mitchell Ohriner’s system for visualizing flow, which avoids standard notation. By contrast, when I examine flow’s performance—its manifestation as a musical object—I opt to transcribe using standard notation, mindful of its limited ability to denote the complexities of rap performance. Across this performative-structural divide, I draw out four more methods underground emcees use in structuring and performing flow: pivot rhyme, closing fragmentation, mimesis, and processing. Each of these techniques indicate an underground emcee’s flow exists in dialogue with listeners’ expectations and challenges the notion that the rapping voice is hierarchically most significant in the musical texture of a rap song.

30. Kajikawa, Sounding Race, 12.
Chapter 2:

Beat Construction and Methods of Alteration in the Underground

2.1 Variety and Repetition

In response to Kyle Adams’ *Music Theory Online* article “Aspects of the Music/Text Relationship in Rap,” Justin Williams remarks on a significant phenomenological development in rap music production, following the genre’s move from the turntable, to the studio, and even more recently to the Digital Audio Workstation (DAW). He writes:

In terms of rap music recordings, the idea of a completely fixed loop is largely fictitious. There may be a set of layers which we could term the ‘basic beat’ which repeats intact for certain durations of time, but…[the beat’s] layers will more often than not fluctuate throughout a given song, with sonic additions and subtractions, manipulations of digital samples, and even sharp changes in aspects of the basic beat.¹

¹ Justin A. Williams, “Beats and Flows: A Response to Kyle Adams, “Aspects of the Music/Text Relationship in Rap”,” *Music Theory Online* 15, no. 2 (June 2009), https://mtosmt.org/issues/mto.09.15.2/mto.09.15.2.williams.html. It is worth noting that Adams does not dispute the occurrence of development within an accompaniment as a phenomenon, but he does maintain that the unchanging elements of the
Repetition and variation are equally essential within the musical lexicon of rap instrumentals. Adams notes that even as the locus of rap music-making moved into the studio, producers remained adherent to the break-beat based origins of the genre, and so structural elements of the hip-hop beat tend to repeat within a four to eight bar, often simple quadruple metrical space. At the same time, Williams’ observations point towards a preference for variation within repetition, made feasible by newer technologies for sampling, manipulating, and composing with pre-recorded digital materials.

Whether the hip-hop beat is primarily repetitive or primarily developmental is indeterminate because both variables exert influence over the creative process; a question of more value is how different producers use these phenomena to aesthetic or rhetorical ends. To invoke Loren Kajikawa’s notion of sounding, variety and repetition factor into how “rap artists produce (and listeners interpret) musical meanings at the level of the song.”² Although Kajikawa focuses on the sounding of racial and gender identities, his critical apparatus may also extend to producers’ use of music to identify with or against their perception of a hip-hop mainstream. I therefore argue that underground producers make beats that code themes and identities in conversation with the hip-hop mainstream while rappers simultaneously declare allegiance to the underground within their flow. Because, as Kajikawa notes, “rap has cultivated a mainstream audience... by promoting highly visible (and often controversial) representations of black masculine identity,”³ underground hip-hop makes room to subversively play with these representations.

What I call the underground signifies a space where multiple approaches to the sonic construction of identity exist.⁴ Rather than being unified by a musical style, underground hip-hop is unified by a culture of listening. This definition is vague because underground beat function as “primary accompanimental layers” (See Kyle Adams, “‘People’s Instinctive Assumptions and the Paths of Narrative’: A Response to Justin Williams,” Music Theory Online 15, no. 2 (June 2009), https://mtosmt.org/issues/mto.09.15.2/mto.09.15.2.adams.html.)

² Kajikawa, Sounding Race, 2.
³ Kajikawa, 5.
⁴ A more in-depth discussion of my definition and limitations of the term can be found in Section 1.4.
is an elusive term, yet it holds importance because it represents an imagined community with which rappers, producers, and listeners identify.\textsuperscript{5}

In this chapter, I argue that underground hip-hop producers sound undergroundness in beats as a way to communicate the emcee’s alternative identity to listeners. I base this argument in transcriptions that illustrate developmental and repeating elements within the musical texture. My four case studies demonstrate two ways in which this occurs: first, underground producers often deviate from mainstream formal models for rap music, and second, they rely on methods of sample and loop manipulation such as \textit{resampling/recomposing}, \textit{choking}, \textit{glitching} and \textit{slipping} to create variety. These methods prioritize an overarching aesthetic of diversity within the musical texture, linking underground production to Olly Willson’s heterogeneous sound ideal of African American music.\textsuperscript{6}

\subsection*{2.2 Methods of Transcription and Analysis}

I use transcription in this chapter—indeed, overall in this project—despite knowing that it introduces a level of abstraction from both the musical practice and perceptual experience of rap music. Scholars such as Joseph G. Schloss have meaningfully analyzed hip-hop production while eschewing transcription altogether on ethical and aesthetic grounds.\textsuperscript{7}

Others, like Kajikawa and Adam Krims, have employed methods of transcription that

\textsuperscript{5} Scholars including Williams and Joseph G. Schloss, have theorized hip-hop culture as an imagined community, a term from Benedict Anderson’s writings on national identities. Such communities have inhabitants who “will never know most of their fellow members, meet them, or even hear of them, yet in the minds of each lives the image of their communion” (see Benedict Anderson, \textit{Imagined Communities: Reflections on the Origin and Spread of Nationalism} (New York: Verso, 2006), 6.)

Hip-hop scholars use the term to create cohesion to discourses within hip-hop. Both Schloss and Williams describe overlapping spheres of association, influence, and reference communicated through songs, beats, and albums. They argue hip-hop’s imagined community therefore communicates and understands structures of tradition, history, and identity through works. (see Joseph G. Schloss, \textit{Making Beats: The Art of Sample-Based Hip-Hop} (Middletown: Wesleyan University Press, 2004), 4, and Williams, \textit{Rhymin’ and Stealin’}, 12–13.)


\textsuperscript{7} Schloss, \textit{Making Beats}, 13–15.
move away from standard notation in the Western Classical tradition. Still others, including Adams and Robert Komaniecki, rely primarily on standard notation in order to present their arguments within traditional spheres of music-theoretical discourse. Each approach holds its own merit, and each privileges a different audience: the creator, the listener, and the academic.

Although I understand Schloss and others’ reticence to transcribe rap music, my choice to do so grows out of the mode of deep listening requisite to creating a transcription. By using transcription, I do not aim to apply “the tools of notation and analysis developed for the study of Western Classical music... uncritically to rap music.” Instead, I offer them as a subjective realization of my “living inside” the musical object for a time. Transcription therefore offers the best method of communicating my listening experience within a written medium; it is an attempt to circulate objects of my own meditative listening.

I use both standard and non-standard styles of transcription in this chapter to distinct ends. First, I use tables that I call “roadmaps” to provide an overview of musical form, noting the relationship between sections, samples, and durations. I also pay special attention to when producers create variety within the musical texture using one of the four methods listed above and defined below. Second, I use standard notation to create a musical “snapshot” of the beat at distinct points in the texture. These snapshots allow me to discuss the function of particular musical layers and also to more closely analyze

12. Each roadmap in the chapter has a corresponding expanded version that details the function and relationship of each instrumental layer and counting durations by samples. These expanded versions can be found in the appendix beginning on p. 66.
the methods of creating variety outlined in the roadmaps. Using staff notation requires a certain reduction of the rhythmic and textural complexity of my pieces, but I use these snapshots in an effort to draw out the moments that cannot be easily notated within them.

As my roadmaps show, underground producers play with expectations for form in mainstream hip-hop, typically avoiding the verse-hook formal model. Ben Duinker defines verse-hook form in hip-hop as an analog to verse-chorus form in popular music, and he shows that hip-hop’s assimilation to mainstream popular culture has correlated with increased use of this model. At the same time, he differentiates verse-hook from verse-chorus on account of the means by which hooks fulfill the role of refrains. Nevertheless, the correlation between verse-hook form and the mainstreaming of rap music in popular culture offers underground producers a model of song form with which to converse in their effort to create hip-hop in dialogue with expectations.

Underground producers tend to make beats that articulate the section types Duinker identifies: hooks, instrumentals, and “looser-organized” sections. Though admitting some ambiguity, I define formal sections in this chapter based on production rather than just text because many of the case studies are through-composed. How a producer chooses to order musical material can either reinforce or contrast the form projected by the vocal performance. Defining formal sections using production, then, becomes helpful for showing when heterogeneity manifests through formal contrast, and when producers use samples and loops to divide an emcee’s through-composed text.

My snapshots show that underground producers prefer variety within formal sections to unaltered loops and samples. Duinker notes that within verses particularly, the looped sequence of the beat can change gradually through the introduction or subtraction...
tion of loops that are generally one, two, or four measures in length through layering.\textsuperscript{16} While underground producers also use layering, the techniques I define in the following paragraphs create changes to the texture that are sharper and more drastic than layering.

Underground producers introduce changes within the beat using techniques that mimic the live, improvisatory roots of hip-hop; these are the methods of alteration I introduced above. In order to present my close readings of each case study below, I will define resampling/recomposing, choking, glitching, and slipping, in the paragraphs that follow.

I use resampling to refer to the changes producers make to a sample that still presents it as an intact whole. The term comes from a function several samplers and DAWs share, where a producer can trigger audio on a track or pad, then engage processing effects that allow them to manipulate pitch, timbre, or dynamics in real time while the result of their manipulations is captured on a second track or pad. Recomposing is the term’s corollary to describe changes made by producers who use live-tracked elements in their mix; producers recompose a loop by adding new pitch and rhythmic material, or by altering the loop’s timbre in some conspicuous way.

I define choking as instances where producers mute a portion of the loop or sample completely, cutting it off as a sound source. While layering can also remove sound sources gradually, a choke happens within the length of a sample or loop. Chokes can occur at lengths perceptually experienced as a beat, as well as rhythmic durations below the level of meaningful notation. Both resampling and choking challenge the perception that a loop has repeated without completely disrupting its function as a loop.

By contrast, glitching and slipping each challenge repetition due to their marked change to the samples and loops. Producers glitch a sample or loop by “chopping” out a portion of audio within the time-span of one beat and repeating it to extend beyond one beat; this interrupts the texture in a way comparable to scratching a vinyl record would in turntablting. By contrast, producers slip a sample in two more subtle ways: they ei-

\textsuperscript{16} Duinker, “Song Form and Mainstreaming,” 96.
ther use samples with slightly varied loop lengths, which, over long periods of time, slip apart, widening the gaps between them; or, alternatively, they slip samples through re-triggering onsets rather than looping them, adding micro-rhythmic delay as an expressive technique. Both methods create a disalignment of sample and loop onsets.

As my analyses below demonstrate, underground producers use these compositional techniques to create variety within the sonic profile of their beats. In both sample-based and live-tracked approaches to beatmaking, I examine case studies that illustrate the internal and formal variety producers construct in dialogue with the emcee’s vocal delivery. I aim to show that producers use these techniques to create variety within the sonic profile of their beats, and that their alterations to samples, loops, and form introduce heterogeneity to the work, articulating an underground aesthetic in comparison to mainstream approaches.

2.3 Sample-Based Case Studies

The contemporary practice of sample-based beatmaking links back to hip-hop’s origins, echoing the practice of looping breakbeats on the instrumental b-sides of vinyl records pioneered by DJs like Kool Herc and Grandmaster Flash. Because producers who sample do not need to be multi-instrumentalists to create a full musical texture, sample-based beatmaking democratizes music production; but, furthermore, it situates hip-hop within lineages of sound. Tricia Rose likens the ingenuity of hip-hop production to other forms of black creativity, where making something good often involves “making... out of the scraps—creating a delicacy of the undesirable, discarded parts.” In the underground, the process of selecting a sample, re-contextualizing it in a new space, and exploring the

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The full extent of variety it may hold seems to be a look backwards to this tradition and, thus, a way of honoring a broader history of the ingenuity of black Americans.

**MF DOOM’s “One Beer”**

<table>
<thead>
<tr>
<th>Section</th>
<th>Timecode</th>
<th>Duration</th>
<th>Sample</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro</td>
<td>0:00</td>
<td>8 Bars</td>
<td>“Huit Octobre” I</td>
<td>Choked in Bar 8</td>
</tr>
<tr>
<td>Verse 1A</td>
<td>0:20</td>
<td>16 Bars</td>
<td>“Huit Octobre” II</td>
<td></td>
</tr>
<tr>
<td>Verse 1B</td>
<td>1:02</td>
<td>16 Bars</td>
<td>“Huit Octobre” II</td>
<td>Choked in Bar 0.4</td>
</tr>
<tr>
<td>Hook</td>
<td>1:43</td>
<td>8 Bars</td>
<td>“Huit Octobre” I</td>
<td>Choked in Bar 8.3-4</td>
</tr>
<tr>
<td>Verse 2B</td>
<td>2:03</td>
<td>8 Bars</td>
<td>“Huit Octobre” II</td>
<td>Choked in Bar 0.4, 8.4</td>
</tr>
<tr>
<td>Verse 2C</td>
<td>2:24</td>
<td>16 Bars</td>
<td>“Huit Octobre” II</td>
<td>Choked in Bar 0.4</td>
</tr>
<tr>
<td>Skit</td>
<td>3:06</td>
<td>26 Bars</td>
<td>Spider-Man</td>
<td>Resampling, drum improv</td>
</tr>
</tbody>
</table>

Table 2.1: Condensed roadmap to MF DOOM and Madlib’s “One Beer.”

Madlib produces “One Beer” using two samples from the French funk band Cortex’s “Huit Octobre 1971.” Outlined in Table 2.1, he sequences these two samples with a prototypical approach to form, in contrast to DOOM’s through-composed verse. Madlib starts “One Beer” with an eight-bar introduction built from the first sample, followed by two sixteen-bar verse-parts built from the second. He then switches back to the first sample, making space for a hook, but DOOM’s verse continues over this projected boundary. After eight bars, the second sample re-enters for another twenty-four, creating a nearly parallel second verse area for DOOM. The two project contrasting forms in their respective roles as producer and rapper, and the dissonance between the two creates heterogeneity between the text and the instrumental.

Madlib also introduces heterogeneity within the beat itself, primarily through disparities in the selection of sampled portions from “Huit Octobre.” His first selection, 1:58–2:09 of Cortex’s recording, is pitched up slightly sharper than a whole step, tonicizing F-sharp. Shown in Figure 2.1, the sample grooves in a triplet eighth swing, featuring synth and bass in octaves arpeggiating I/7 and a skeletal drum part emphasizing backbeats. When
the track returns to the first sample, the musical elements grant the sample a hook-like function.

The first sample sounds like a hook for two reasons. First, it is texturally distinct from the sample which underscores the verse portion of “Huit Octobre,” the primary instrumental criterion Duinker identifies for distinguishing hooks from verses.  

Second, it is created from a shorter, more singularly-focused musical idea. Its harmony, which Adams typifies as repetitive, is created from two arpeggiation of a one-measure idea in rhythmic unison, only with slightly varied articulations in each statement. Overall, this section is sparser in texture and musical material and sounds like a point of arrival.

Madlib contrasts the first sample with his selection of the second, 0:23–0:25 of the Cortex recording. Although also pitched up slightly sharper than a whole step, this portion slows from 95 bpm to 92 bpm and has a straight rhythmic feel. As Figure 2.2 shows, both the overall musical texture and harmonic content of this sampled section have thickened in comparison to the first. Playing distinct and more typical instrumental roles, the bass and synth underscore a vocal part, and the three create new oscillating harmonies.

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The texture’s most drastic change comes from the drum’s rhythmic complexity in this sample. Along with the harmony, the drums are thicker and more active, using distinctive fills and striking timbres throughout the four bar loop; this culminates in the prominence of the two-beat long triplet eighth fill in m. 2 of Figure 2.2. As Schloss notes, producers often choose their samples based on the aesthetic delight they experience concerning timbre, especially drum timbres. 21 Certainly, this second section luxuriates in the sonic quality of the drums.

Comparing the texture, harmony, and groove of each of Madlib’s samples illustrates how internally varied “One Beer” is. Although Madlib makes use of some of the methods of altering samples—particularly, choking the sample to delineate sectional transitions—his primary method of introducing variety in the main part of “One Beer” is through the juxtaposition of the two lead samples. Juxtaposing musical elements in this manner aligns with Wilson’s heterogeneous sound-ideal because of the rhythmic clash and timbral stratification this creates across sample boundaries. 22

The final skit section of “One Beer” functions as a culmination of Madlib’s stylistic juxtapositions. The skit’s music is built from a looped portion of the soundtrack to “Dr. Doom, Master of the World,” an episode of the 1981 animated Spider-Man television se-

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Snapshot of Madlib’s second sample in “One Beer,” 0:20–0:31.}
\end{figure}

\textsuperscript{21} Schloss, Making Beats, 141–143.
ries. He combines dialogue from this episode with another selection from “The Fantastic Four Meet Dr. Doom,” a 1978 episode of The New Fantastic Four. Beneath this, Madlib improvises a through-composed drum sequence beholden to the boom-bap structure of kick and snare ubiquitous in hip-hop. All in one track, Madlib draws on a “rich assortment of multimedia borrowings, references, and parodies that operate in hip-hop music as a whole.”\(^{23}\) Juxtaposition is his method of sounding DOOM’s alternative identity.

**Kendrick Lamar’s “Rigamortis”**

<table>
<thead>
<tr>
<th>Section</th>
<th>Timecode</th>
<th>Duration</th>
<th>Sample</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro</td>
<td>0:00</td>
<td>4 bars</td>
<td>“The Thorn”</td>
<td></td>
</tr>
<tr>
<td>Hook</td>
<td>0:10</td>
<td>6 bars</td>
<td>“The Thorn”</td>
<td>Full sample plays</td>
</tr>
<tr>
<td>Verse 1A</td>
<td>0:27</td>
<td>12 bars</td>
<td>“The Thorn”</td>
<td></td>
</tr>
<tr>
<td>Verse 1B</td>
<td>0:59</td>
<td>10 bars</td>
<td>“The Thorn”</td>
<td>Improvisatory sample choking</td>
</tr>
<tr>
<td>Hook</td>
<td>1:26</td>
<td>6 bars</td>
<td>“The Thorn”</td>
<td>Lead sample slips backwards</td>
</tr>
<tr>
<td>Verse 2A</td>
<td>1:43</td>
<td>6 bars</td>
<td>“The Thorn”</td>
<td></td>
</tr>
<tr>
<td>Verse 2B</td>
<td>2:04</td>
<td>8 bars</td>
<td>“The Thorn”</td>
<td>Alternating sample choking</td>
</tr>
<tr>
<td>Hook</td>
<td>2:31</td>
<td>6 bars</td>
<td>“The Thorn”</td>
<td>Improvisatory sample choking</td>
</tr>
</tbody>
</table>

Table 2.2: Condensed roadmap to Kendrick Lamar and Willie B’s “Rigamortis.”

On “Rigamortis,” Willie B and Sounwave use Willie Jones III’s up-tempo jazz track “The Thorn” as the lead sample (0:13–0:20 of Jones’ recording). His combo groups simple quadruple meter into 3+3+2 beat divisions to underscore a saxophone and trombone theme that ends with a pickup figure. This texture is detailed in Figure 2.3, which highlights boxes the pickup in red.

Kendrick’s track begins with a minimally-altered version of the first two measures of the sample. The producers change it by filtering out the low end and pitching the sample up slightly sharper than four semitones. The two-bar phrase sounds as a one-bar unit within a down tempo hip-hop context. Eight bars later, the full four-measure sample is presented beneath Lamar’s hook as a two-bar unit.\(^{24}\) Within the first verse, Willie B and

24. Table A.3 shows the moment where the full sample enters, notated as “The Thorn” II.
Sounwave also layer in a drum sequence and sub bass drone on a low A using a filter sweep to demarcate their entrances. Figure 2.4 shows the relationship of the sample (now in rhythmic diminution) to the other elements of the musical texture; this structure repeats unchanged from 0:43-0:55, with only slight choking of the lead sample.

The musical additions recontextualize “The Thorn” within a single A minor chord and simple quadruple groove. Together, the sample, added drums, and bass each help ground the listener within Lamar’s form projected by vocal delivery, which frequently shifts around throughout “Rigamortis.” Specifically, Lamar’s vocals complicate the form with shifts in text and delivery. In Verse 2, Lamar briefly recapitulates the “He Dead!” call-and-response text from the hook, bisecting the verse. He also restates the hook text at the beginning of Verse 2A, repeating “Got me breathin’ with dragons” to set up a new rhyme structure and flow in the second verse. At the close of the Verse 2B, Lamar modulates into a higher and more rhythmically intense register, one that he identifies with his “Gemini” alter-ego. 25 The producers thus create contrast through simplicity by using discrete, simplistic musical elements.

Despite using samples and loops in a minimized way, Willie B and Sounwave vary

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them subtly within the repeating texture. As Table 2.2 notes, sample choking features heavily in this track; the lead sample from “The Thorn” rarely sounds intact once introduced. With Lamar’s vocals taking on the “tendency to fill up sonic space” of Wilson’s heterogeneous sound-ideal, the producers choke the sample because it removes elements from the texture, and they employ the technique most drastically when Lamar’s vocals reach an apex in Verse 2B. From 2:06-2:18, the lead sample drops out for measures at a time, leaving space for Lamar’s flow. Thus, their implementation of sample choking exists in conversation with Lamar’s musical decisions.

More subtly, the producers slip the lead sample to alter the beat in “Rigamortis.” Through expressive, delayed re-triggering, the microrhythmic relationship between musical elements from “The Thorn” and the producers’ added loops exist in a state of rhythmic flux throughout the work. Where the pickup gesture in the saxophone (boxed in

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27. My theory of sample slippage dovetails with Anne Danielsen’s work on the Beat Bin and rhythmic tolerance (see Anne Danielsen, “Here, There, and Everywhere: Three Accounts of Pulse in D’Angelo’s ‘Left and Right,’” in Musical Rhythm in the Age of Digital Reproduction (London: Routledge, 2016), 29ff. The affective result of these shifts is akin to phasing, as sonically discrete samples move in and out of sync with each other.
red in Figures 2.3 and 2.4) fell at the metrical end of the loop when it was first heard, the pickup gesture falls in different metrical positions throughout the hook, displaced from its original position in the groove. As Figure 2.5 shows, the pickup figure sounds on the downbeat. The drum sequence and Lamar’s call-and-response vocal enter on the downbeat—and the saxophone, trombone and sub-bass enter with them. The producers’ use of slippage, then, allows for a sample, which is typically sonically fixed, to become rhythmically fluid.

Willie B and Sounwave’s production on “Rigamortis” challenges a listener’s sense that the lead sample on the track is uniformly repetitive. While choking and slipping serve as their primary methods of altering the sample itself, they also create variety in the beat through the use of digitally-recorded loops, layering in and out of the mix. These loops are all used in conversation with Lamar’s vocal delivery, helping to create an even greater sense of variety within the musical texture. Compared to Madlib’s approach to beatmaking, which created variety primarily through the juxtaposition of disparate samples, Willie B and Sounwave track new elements around the lead sample, widening the
sample’s context. This links the practice of creating variety in sample-based hip-hop to another style of production: live-tracked recording.

2.4 Live-Tracked Case Studies

The second half of this chapter shifts in focus from beats that are sample-based to beats that are live-tracked. While the distinction between these approaches remains helpful to identifying and describing the components of a musical texture, it is not a distinction that holds significance beyond this. Schloss’s ethnographic work in the early-to-mid 2000s Seattle hip-hop scene leads him to the conclusion that “the distinction between sample-based and non-sample-based hip-hop is a distinction in genre.” I do not intend to bring in such a distinction.

While Schloss’s framework may help to explain works in early 2000s underground hip-hop, it becomes increasingly problematic within modern approaches to music making. When a beat is created in a DAW, the distinction between sampling vinyl, using pre-recorded audio or MIDI loops, and live-tracking an instrument becomes less drastic than within older recording hardware. With the following examples, I aim to demonstrate that beats are not underground because of the means of generating musical material, but rather because of the manipulation of material thereafter.

**Milo’s “Rabblerouse”**

Kenny Segal’s instrumental for “Rabblerouse” creates variety as a complement to Milo’s emceeing. As shown in Table 2.3, “Rabblerouse” consists of a single twenty-four-bar verse framed by an intro and outro. The track does not end with music but sounds a vocal sample of the video game character Yoshimitsu from *Soulcallibur II*, saying “overconfidence is the greatest enemy” before giving a battle cry. The sample links “Rabblerouse” as an

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<table>
<thead>
<tr>
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<th>Duration</th>
<th>Sample</th>
<th>Note</th>
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<tr>
<td>Intro</td>
<td>0:00</td>
<td>4 Bars</td>
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<td>Rhodes extends over boundary</td>
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<tr>
<td>Verse</td>
<td>0:08</td>
<td>24 Bars</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>0:14</td>
<td></td>
<td></td>
<td>Drum glitch</td>
</tr>
<tr>
<td></td>
<td>0:36</td>
<td></td>
<td></td>
<td>Drum glitch, bass recomp.</td>
</tr>
<tr>
<td>Outro</td>
<td>0:56</td>
<td>4 Bars</td>
<td></td>
<td>Glich, recomp., and choking</td>
</tr>
<tr>
<td></td>
<td>1:03</td>
<td></td>
<td>Soulcallibur II</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.3: Condensed roadmap to Milo and Kenny Segal’s “Rabblerouse”

introductory song fragment to Milo’s full LP, *So The Flies Don’t Come*. It both propels the listener into the downbeat of the second track, “Souvenir,” and links thematically to a line Milo delivers in the penultimate track, “Napping Under the Echo Tree,” where Milo gives himself the epithet “Yoshimitsu of Boyle Heights.” With both sample selection and music, Segal uses “Rabblerouse” to create instability, urging the listener on toward the album as a whole.

Several elements contribute to the fragmentary nature of this opening track. Its primary melodic component is a unconventional six-bar chord loop, played in staccato quarter notes on a Fender Rhodes. Although functional in E Dorian, the expansional loop sounds unresolved.\(^{29}\) The C#\(^{4}\) that ends the loop, rather than resolving the suspension down, cycles back to a similarly-voiced E\(^{4}\). The stability of this chord loop is also challenged by Milo’s vocal entrance, which comes after a more-conventional four bars. The Rhodes progression extends over this formal boundary, offsetting the downbeats being projected by rapper and producer.

Segal uses glitch as a method of alteration in response to this dissonance between the agogic stress of the rapped text and the beat. Boxed in red in Figure 2.6, he alters where the loop begins, reworking its metrical accent. In m. 2, four quarter-note kick and hi-hat hits repeat for a full bar; here, Segal has likely selected a portion of the drum loop in his DAW and duplicated it four times, restarting the loop in m. 3. This instance underscores

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\(^{29}\) Adams, “Harmonic, Syntactic, Motivic.” Adams does not make it a requisite condition of the expansional harmonic category to function as a complete phrase, although he notes that it commonly will.
the textual beginning of a new idea: Milo begins “The wordsmith gets knee-deeper, beleaguered” and Segal’s glitch transforms the start of the phrase into an upbeat, so that “deeper” becomes the strongest metric point of the phrase. This glitch reworks the alignment of the drum loop and rapper, a partial corrective to the dissonance between Milo’s entrance and the loop.

A parallel instance to the first glitch occurs from 0:36–0:48, and its onset is further complicated by Segal’s use of a bass recomposition. Figure 2.7 shows the loops in this moment, with the changes to the bassline implemented by bassist and frequent collaborator of Segal’s, Mike Parvizi. Parvizi decorates the originally sparse bass lines that begin mid-measure with sleek, syncopated melodic lead-ins. This busies the texture while Segal uses another glitch to accentuate mm. 2-3. Milo’s text (“suits of armor for suicide
note authors”) again becomes a point of agogic stress, but around this measure, Parvizi’s basslines increase the number of rhythmic onsets within the measure, thereby increasing heterogeneity.\(^{30}\)

Glitch becomes a method of constructing cohesivity at the track’s close. As Milo comes to the end of his verse, Segal uses the same downbeat-repeating drum glitch, pairing it with a glitch that extends the \(E^{sus4}\) harmony. This point of stasis, though harmonically unresolved, allows for the listener to hear rhythmic unification for a brief instant, before the texture dissolves and the Yoshimitsu sample is triggered. Drawing on several methods of altering loops in the beat, Segal brings together the many fragmentary, disparate pieces of the loop for a brief moment to set a listener up for what’s to come on the record overall.

Segal’s fragmentary aesthetic on “Rabblerouse” sounds as a mode of alterity because it is uncommon for a hip-hop beat not to function as a closed loop. The metric dissonance projected from the beginning does not resolve by the track’s end, necessarily drawing a listener in to the text function and pointing towards the remaining tracks on the album. This beat is unstable alone, but functions cohesively with the sonic palette of Milo’s LP *So The Flies Don’t Come* as a whole. This technique is predicated upon an interest in lyricism and album cohesion propagated within the underground hip-hop scene.

**billy woods’ “Checkpoints”**

Segal also served as the beatmaker for billy woods’ “Checkpoints,” as well as the *Hiding Places* LP which houses it. Comparing his production across projects for two different emcees shows how Segal responds to both the artist and the work itself, articulating identity uniquely for each. Compared to “Rabblerouse,” Segal’s instrumentation on “Checkpoints” is at once sparser and more timbrally intense; the choice to use distored, low-register electric guitar played on neck pickups matches woods’ more highly ener-

\(^{30}\) Wilson, “The Heterogeneous Sound Ideal in African-American Music,” 328. Wilson describes the “tendency to create rhythmic musical events clash or disagreements of accents” as a component of the ideal.
<table>
<thead>
<tr>
<th>Section</th>
<th>Timecode</th>
<th>Duration</th>
<th>Note</th>
</tr>
</thead>
<tbody>
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<td>Intro</td>
<td>0:00</td>
<td>8 Bars</td>
<td>Guitar anacrusis choked</td>
</tr>
<tr>
<td>Verse 1A</td>
<td>0:26</td>
<td>22 Bars</td>
<td>Vocal, synth anacrusis</td>
</tr>
<tr>
<td>Verse 1B</td>
<td>1:06</td>
<td></td>
<td>Synth, drum recomp</td>
</tr>
<tr>
<td>Interlude 1</td>
<td>1:40</td>
<td>4 Bars</td>
<td></td>
</tr>
<tr>
<td>Hook?</td>
<td>1:51</td>
<td>4 Bars</td>
<td>All parts anacrusis</td>
</tr>
<tr>
<td>Interlude 2</td>
<td>2:06</td>
<td>4 Bars</td>
<td></td>
</tr>
<tr>
<td>Verse 2</td>
<td>2:20</td>
<td>15 Bars</td>
<td>Synth anacrusis glitch</td>
</tr>
</tbody>
</table>

Table 2.4: Condensed roadmap to billy woods and Kenny Segal’s “Checkpoints.”

getic emceeing. Likewise, Segal responds to formal sections of text, working with woods to create formal contrast. Table 2.4 shows the main formal features: a brief introduction, followed by two verses of varying lengths, which are divided by an interlude and short hook-like vocal section.

An important feature of the beat’s construction is the use of anticipation and anacrusis. Underscoring woods’ entrances which typically enter two bars before a downbeat, Segal introduces all musical elements in the two beats preceding the expected loop onset. Figure 2.8 shows each element’s entrance from 0:26-0:39 when woods’ first verse enters. Segal employs a high synth leadline paired with the guitar loop outlining an F-sharp power chord. An eighth note before the downbeat, the guitar oscillates to a G harmony, supported by an anticipation in the kick drum. These anticipations create some rhythmic disorientation in contrast to the snare drum, which hits in its expected position on the backbeats.

Segal introduces variety into the texture using two recompositions. His drum recomposition, shown in Figure 2.9, divides the first verse into two eleven-bar units. Following the structure outlined by the kick-snare pattern up to this point, a crash cymbal enters with the downbeat anticipation in the kick, and the same sample sounds a step higher.

31. I use the term anacrusis as opposed to pickup here because the track does not contain the final two beats. In the fifteenth bar of the second verse, woods raps through beat two, before a static signal sounds for a beat, cutting off completely before beat four.
along with an open hi-hat sample above the snare’s backbeats. This rock-like groove serves as Segal’s means of creating variation at an unexpected point of formal division.

Even with woods’ vocal delivery signalling a change, the drum recomposition can catch the listener off-guard. New additions to the drum sequence highlight irregularities in his placement of the alternating kick and snare and are added at a surprising moment in the form. On another level, Segal’s choice of drum timbre surprises a listener by challenging their sense of genre. Throughout *Hiding Places*, Segal sought out “distorted guitars and psych-rock timbres,” playing with stylistic allusion on tracks like “Checkpoints,”
“Spongebob,” and “Speak Gently.” On “Checkpoints” specifically, the full drum pattern alludes to rock while introducing variety.

![Figure 2.10: Snapshot of the chordal recomposition in “Checkpoints,” 0:40–0:53.](image)

Additionally, Segal recomposes the chord loop to introduce formal and textural variety. Figure 2.10 shows its first entrance, midway through Verse 1A. Still in rhythmic anticipation of the downbeat, the chord loop switches from a guitar outlining G and F-sharp power chords to a Suzuki Omnichord planing between G and F-sharp minor triads in the same low-mid layer. The paired range and voicing, as well as the similar rhythm used in the Omnichord’s version, challenges the sense that a new layer has entered and ends up sounding more like the timbre of the original loop has changed.

Each time the chordal recomposition enters, Segal removes all other accompaniment before reintroducing the snare and synth lead. This thinned out texture takes on two distinct formal roles: within the first verse, Segal uses this recomposition to reduce the energy of the beat, making the drum recomposition even more drastic when it re-enters with the guitar twenty seconds later. Between the two verses, the recomposition signals a higher-order formal boundary. The four bars of text woods delivers that Table 2.4 labels a Hook? are offset by Omnichord interludes but underscored by the more-fully orches-

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33. This use of timbral shifts within a shared musical range creates an unblended, heterogeneous quality within the chordal accompaniment, in keeping with Wilson’s heterogeneous sound ideal (see Wilson, “The Heterogeneous Sound Ideal in African-American Music,” 329.)
trated texture characteristic of the verses. This affords a certain weight to the text of the four intervening bars; likewise, woods’ text in that section has a certain thematic weight to it:

Pace the palace wing, dethroned king jump when the phone ring,
Egyptian cotton, but you can’t sleep, not a wink, not a wink,
You can’t blink, not a wink, you can’t blink, not a blink,
Dethroned king can’t sleep not a… 34

Throughout “Checkpoints,” Segal uses recompositions to create an internal variety within the song form while playing with the broader, generic context of underground hip-hop. In his memory of mainstream rap history, the use of rock-like timbres in hip-hop has, on occasion, yielded “disastrously wack results.” 35 His choice to navigate this potentially-treacherous sonic territory reveals his willingness to re-purpose sounds which have associations with mainstream expectations. At the same time, the timbral particularities of “Checkpoints” illustrate his desire to do so with specific aesthetic and compositional ends in mind: namely, those linked to the textual, thematic, and vocal specificities of woods’ emceeing. Segal’s primary concern as a producer, then, seems to be sounding an identity with the emcee.

### 2.5 Co-Creation of Underground Identity

As a stylistic practice in underground hip-hop, producers work as coauthors in the creation of underground identity with the emcee. Because their work is largely non-textual, underground producers use mainstream expectations for form and content in a hip-hop track as a basis for a type of sonic play that manifests as heterogeneity within a hip-hop

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beat’s construction. Underground producers create forms that are non-standard, articu-
lating them through sample and loop juxtapositions, and ascribing formal rhetoric to dif-
ferent portions of the beat through their choice of sequencing. Within samples and loops,
producers create heterogeneity with a variety of techniques for manipulating sound, four
of which I have explored in depth during this chapter. For the underground producer,
formal and compositional variety functions as a sonic metaphor for the non-normativity
of the emcees who rap over these tracks.
3.1 A Working Definition of Flow

In comparison to the beat as its conceptual counterpart, flow resists a clear definition in academic and technical discourse. While there seems to be some agreement that the beat is comprised of musically-distinct layers looping throughout a piece, definitions of flow range from anywhere as specific as “simply the rhythms and rhymes [a hip-hop song] contains”\textsuperscript{1} to as wide-ranging as “all of the rhythmical and articulative features of an emcee’s delivery of the lyrics.”\textsuperscript{2} Before I discuss the stylistic hallmarks of flow in underground hip-hop, I will ascertain a definition of flow more broadly.

Consider, once more, Open Mike Eagle’s characterization of his own relationship to MF DOOM’s flow: that Eagle has to be careful with it because of how much time he has

\textsuperscript{1} Paul Edwards, \textit{How to Rap: The Art and Science of the Hip-Hop MC} (Chicago: Chicago Review Press, 2009), 63. While Edwards’ statement comes within the context of an instruction manual on rapping (and therefore his reductiveness may be pedagogically useful), this attitude toward flow is implied by music academics who transcribe flow primarily on one line of staff notation; such transcriptions show flow as something existing within a fixed (or indiscernible) pitch space, with unambiguous, highly discernible rhythms.

\textsuperscript{2} Adams, “On the Metrical Techniques.”
spent ‘in DOOM’s mind.’

His relationship to DOOM’s flow demonstrates the term encompasses more than rhythm and rhyme alone; by themselves, these elements do not account for flow being tied to an emcee’s specific or generic style. Flow, then, refers to something more than the manifestation of rhythm through an emcee’s rhymes. At the same time, emcees describe flow as text contextualized in music, drawing contrasts with non-musically-bounded poetry. The emcee Rakim coined a definition of rap as “rhythm and poetry,” distinguishing between texts that can be rapped and texts spoken only as poetry. Clarifying this distinction, the emcee Myka 9 of Freestyle Fellowship offers: “sometimes I might write a poem, a spoken-word poem, but then morph that into a rap rhythmically.”

Myka 9’s insight suggests a continuum for rapped text; it exists on a spectrum of text delivered in musically-bounded ways and non-musically-bounded ways. Emcees, therefore, have two concerns with flow: how a text is structured and how it is performed.

The distinction between rap’s structure as text and its performance as music is foundational to my conception of flow in this chapter. I believe the techniques underground emcees employ when rapping can be divided into categories I refer to as structural and performance techniques. Structural techniques deal with rap as text, considering its syntax with primacy over its manifestation in the musical object. By contrast, performance techniques focus on rap as music, considering the means by which an emcee expresses the structures they contrive, as well as the decisions they make when treating the voice as an object within a digital recording. With these categories, I aim to demonstrate Ohriner’s claim that flow “encompasses phrasing, rhythm, meter, accent, patterning, and groove, not to mention the relations among these parameters.”

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3. Caswell, Rapping, Deconstructed. For my earlier discussion of this passage and its relationship to meditative listening, see Section 1.3.
5. Interestingly, rapped verses can be and often are delivered on varying degrees of this spectrum. Mitchell Ohriner notes two distinct modes of delivery, which he calls speech-rhythmic and music-rhythmic, based on rapped syllables’ degree of alignment between the musical meter (see Mitchell Ohriner, “Lyric, Rhythm, and Non-alignment in the Second Verse of Kendrick Lamar’s ‘Momma’,” Music Theory Online 25, no. 1 (March 2019), https://mtosmt.org/issues/mto.19.25.1/mto.19.25.1.ohriner.html.
3.2 Chapter Overview and Definitions

In this chapter, I examine four techniques that underground emcees employ in structuring and performing their flow; I argue that, like producers, their choice to use these techniques reaches listeners as underground. The techniques I define below do not run the gamut but rather feature in salient examples of the subgenre. My terms divide into subcategories of structural and performance techniques, a distinction based on my preceding discussion of flow. When the underground emcee inhabits the role of writer, they experiment with structuring techniques including pivot rhyme and closing fragmentation to craft their verses. Stepping into the recording booth or onto the stage, the emcee shifts into their role as rapper and therefore draws on performance techniques such as mimesis and processing to shape their vocal delivery. Each of these techniques serves as the focus of one of the close-readings that follow, so I will clarify their functions before providing examples.

As a device for constructing a verse, a pivot rhyme allows an emcee to execute a shift in end rhyme; it occurs when the concluding words of the previous bar link to text that falls within the first beat of the next bar. In this instance, the rapper uses a word or phrase as the primary rhyming structure a new textual unit. Often the emcee uses this instance as a way to play with audience expectation, taking the listener’s focus on this pivot rhyme to link units together semantically.

Underground emcees employ closing fragmentation to mark the end of some sort of formal section. To accomplish this, they write a full syntactic unit, usually spanning one bar, then signal a close through fragmenting and repeating the component elements of the phrase in a more improvisatory style of delivery. Fragmentation and repetition here do not function as they do in the construction of a hook; rather, they demonstrate to the listener that some larger textual unit (a verse-part, verse, or the song itself) is ending.
With performance techniques, underground emcees position their voice as a layer amongst the rest of the musical mix, rather than the principal element within it. In particular, the use of mimesis, or stylizing vocal delivery to mimic other elements in the beat layer, draws attention to elements of the beat, foregrounding their musicality. This promotes the other musical layer to the role of co-soloist rather than accompanist, so that the listener focuses it equitably with the flow.

In music production, processing more broadly refers to the manipulation of digital audio after it is recorded through the use of equalization (EQ), compression, and reverb, but here I use it specifically to discuss changes made to the vocal signal as a form of electronic composition. Rappers use processing effects like delay, distortion, and pitch transposition to alter the audio of their voice during or after tracking it as a producer might with any other musical element; the result is vocals that function as sound as much as they do text. Processing treats the voice as if it were any other musical layer and democratizes its position within the mix overall.

### 3.3 Structuring Techniques

Transcribing flow demonstrates the limitations of staff notation, perhaps more transcribing any other musical element in hip-hop. Throughout this project, my dedication to standard notation transcriptions arises from my desire to emulate what Kofi Agawu conceptualizes as a “post colonial transcription,” one based in an “ideology of sameness so that...we can gain a better view of difference.” However, my approach to transcription

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7. This definition encompasses vocal glitch, a parallel process to what occurs in the production of the beat (see Section 2.2.)

8. Kofi Agawu, “The Invention of African Rhythm,” in Representing African Music: Postcolonial Notes, Queries, Positions (New York: Routledge, 2003), 67. Agawu’s chapter traces a history of non-African scholars transcribing Northern Ewe drumming in a way that both essentializes and exoticizes African music as primarily rhythmic and therefore fundamentally different from Western approaches to music making. Although I do not wish to employ colonization uncritically as a metaphor for music theory’s relationship to hip-hop, I do believe that the same essentializing and exoticizing tendencies would manifest if I were to completely avoid standard notation for this repertory.
thus far has yet to factor in another point Agawu makes: no singular mode of representation can sufficiently convey the totality of a listening experience. In dealing with flow as a textual structure independent from its musical manifestation, I opt to use non standard representation of the music by transcribing using Ohriner’s modulo 16 grid transcriptions.

Ohriner’s transcription method simplifies elements that become problematic when transcribing flow in standard notation. His 16-point grid for a bar avoids proliferate use of eighth, sixteenth, and thirty-second notes, not to mention syncopation between them. This also simplifies naming structure. Because the system labels each metric position with a number from 0–15, one can more succinctly communicate a syllable landing on “the third sixteenth note of beat 3” as position 10, for instance. Lastly, Ohriner’s system does not force a transcriber to choose fixed metrical positions in the same way standard notation and adaptations of the Time Unit Box System (TUBS) for flow do; if a syllable onset occurs slightly before the beat, one simply moves the corresponding circle. Although vocal groove and non-alignment with the beat’s projected meter is not an explicit focus in this chapter, the ability for a system to adapt between quantized and non-quantized rhythms is foundational to being able to transcribe flow.

When employing Ohriner’s grid transcriptions in this chapter, I make some slight alterations in order to better serve the purposes I discuss. I primarily use filled in circular notation to denote rhyming syllables, and I do not connect polysyllabic rhymes with any additional markings; this simplifies the process of depicting end-rhymes, which in underground hip-hop are more often polysyllabic than they are monosyllabic. If an internal syntactic unit also rhymes with the end rhyme, I mark it with black circle as well. When, however, an internal rhyme manifests that does not align with the end rhyme, I use a

10. Ohriner overviews his system and details his justification for the method in Ohriner, Flow, xxviii–xl and 7–9, respectively.
grey circle to track the units that relate. This allows me to demonstrate syllables within one phrase correspond to one another even if they do not correspond to the end rhyme, another somewhat common approach to structuring text in underground hip-hop.

**Madvillain’s “Great Day”**

Madvillain, the title given to DOOM and Madlib’s collaborations except for “One Beer,” looms large in the world of underground hip-hop. One unrelenting focus of the accolades for their 2004 double LP *Madvillainy* is DOOM’s flow: in the words of Ta-Nehisi Coates, “[*Madvillainy*’s] singular sound came mostly from [DOOM’s] raspy baritone rendering a sort of nerdcore poetry.”¹¹ This categorization of DOOM’s flow as both nerdcore and artistic compels me to analyze its undergroundness. As I have noted elsewhere, these terms proliferate in criticism in the popular press when discussing underground emcees.¹²

Coates’ claim about DOOM as an eccentric emcee finds purchase beyond the mythologizing the hip-hop community constructs around the him. Kyle Adams, for instance, notes that on “All Caps” both the melodic samples (various portions of the main theme for the NBC crime drama *Ironside*) and DOOM’s flow “[seem] to float free of the meter, being only weakly tethered to it by the drum sample.”¹³ Adams characterizes DOOM’s flow in this way after examining the structure of its syntax; particularly, he shows how rhymes in “All Caps” do not create metric regularity, and that syntactical units (Adams calls them phrases) often cross metrical boundaries. DOOM’s novel use metrical irregularity, he argues, contributes to the perception of DOOM as an underground rap artist.

While metrical ambiguity and enjambment may play a role in DOOM’s sounding as

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¹² A more detailed discussion of nerdcore can be found in Section 1.2 and one that relates the concept of artistry to undergroundness in Section 1.4.

¹³ Adams, “On the Metrical Techniques.” What Adams notes about the *Ironside* sample likely bolsters my claim that sample slippage is a frequently-employed technique in underground hip-hop production, but it is not uniformly employed across Madlib’s sampling practice (more on this below).
underground on “All Caps,” I am hesitant to accept this as the whole picture of DOOM’s alternative identity. A counterexample to the techniques Adams accounts for on “All Caps” emerges from the track that immediately follows it on Madvillainy—“Great Day.” The beat’s primary melodic sample comes from “How Do You Believe,” an instrumental funk track by Stevie Wonder, released in 1968 under the alias Evits Rednow. Madlib closely aligns the sampled elements (electric piano, harmonica, bass, and auxiliary percussion) with the drum break he uses and marks out a hypermetric downbeat with a C-sharp minor gospel lick every fourth bar in the A section.14

Figure 3.1 shows how DOOM, as might be expected, flows with a syntactic structure of a similar regularity. Entering after the downbeat where the sample loops, he raps: “Mad plays the bass like the race card, / Villain on the case to break shards and leave her face scarred.” In these two bars, DOOM fits the setup and punchline squarely within each barline, landing the two-syllable rhyme that closes each of them on positions 12 and 14. The internal rhyme in the second bar (“break shards”) occurs in a metrically weaker position (6 to 8, as opposed to 4 to 6), but falls within what Ohriner refers to as the same durational segment (in this case, a value of 2 on the grid). Rather than interrupting the sense of regularity in the flow, the internal rhyme in this bar creates an anticipation for the rhythmically “restored” position of the end rhyme.

Following the restoration, DOOM’s flow becomes more syntactically and rhythmically complex, building up to the four-bar loop of the sample. Bars 25 and 26 increase the number of syllable onsets from 18 to 22, as well as the frequency, position, and syllable count of the rhymes. In the setup bar, DOOM creates an internal rhyme with “Groovy dude” and “prove to be rude,” each fitting within a durational segment of 2 from positions 2–4 and 10–12, respectively. In the punchline, “movie food” once again restores the metric position of the end rhyme, preceded by two softer, internal rhymes (“stuff is like” with “what

14. This type of metric regularity also pervades “One Beer,” where the whole instrumental before the skit is sampled from one track by the funk band Cortex (see Section 2.3.)
Figure 3.1: Avoided pivot rhyme in Madvillain’s “Great Day,” 0:59–1:15.

you might” falling between 2–4 and 6–8). Despite the increase in internal complexity, the syntactic structure of these bars maintains regularity: DOOM fits a sentence structured “x, but y” within the same time span as the previous setup and punchline.

The structural regularity of the first four bars establishes a connection to the next four, two of which I transcribed as a part of Figure 3.1. I perceive a semantic link in bars 26 and
27 that DOOM writes to move on to a new structure but, in the process, invites me as a listener to imagine a pivot rhyme that does not manifest. My expectation at the end of bar 26 is that DOOM is going to rap about butter: not only because I put butter on “movie food,” but also because he has done so twice already on the album up to this point.15 Somewhere in the first beat of bar 27, DOOM could mention butter and the word as a two-syllable rhyme that sets up the end rhyme of the next quatrain. He, of course, thwarts this expectation, positing “uh…what is jalapenos?” as if it were a botched Jeopardy! answer, linking an unexpected but semantically related idea across bars 26 and 27. The bar instead opts for jalapenos as an end rhyme for the following quatrain. With its final two syllables falling on positions 12 and 13, jalapenos ushers in a set of highly regular lines, each ending with “holla at ya seniors,” “hashish fienda,” and “grass is greener” in the same metric positions.

DOOM’s avoidance and the next quatrain’s regularity provide crucial context for a similar moment between bars 34 and 35, an instance where I do apply the term pivot rhyme. Figure 3.2 overviews a third quatrain with a similarly regular structure. “Wishes” falls on positions 11 and 12, displaced 1 position forward from the ends of the two following syntactic closes: “mad glitches” and “jaw twitches.” DOOM’s closely-related metric placement of the middle bars sets the listener up to hear: “One thing this party could use is more…booze.” And he makes that ellipsis audible! Heightened by the presence of an ad-lib track where DOOM coughs to clear his throat, DOOM plays on listener expectations not only concerning rhyme but also those concerning rap’s “topical stereotype”: the trick of this moment is less his implication of the word “bitches” and more one’s expectation that he will say it.16 In effect, DOOM points the mic towards the listener at the end of the quatrain, asking them to examine their own expectations.

DOOM’s flow patterning and regulated syntax lead to this moment; he crosses a bar-

15. DOOM refers to his “buttery flow” on “Raid” and Madlib’s beats as “so butter” on “All Caps.”
16. My analysis of this moment varies from Estelle Caswell’s, who cites a Pitchfork review claiming the “hiliarity” of this moment ensues from DOOM’s non-sequitur (see Caswell, Rapping, Deconstructed).
Figure 3.2: Pivot rhyme in Madvillain’s “Great Day,” 1:21–1:37.

line, intentionally, giving the listener a moment to expect one close to the phrase, before veering off in another direction. As he continues rhyming, this pivot on “Great Day” lingers because of its play on expectation. Like an underground producer, DOOM has directly engaged a listener who has normative expectations about rhyme and content in a rap lyric, but his move away in this moment speaks to his identity as an emcee.
Armand Hammer and R.A.P. Ferreira’s “Dead Cars”

Armand Hammer—a collaboration between billy woods and ELUCID—is a flagship act on the roster of the New York based underground label Backwoodz Studioz. The track “Dead Cars” from the 2019 LP Shrines features production from Kenny Segal, as well as a feature verse from R.A.P. Ferreira—two premiere artists from Ruby Yacht, an underground hip-hop label for which Ferreira serves as the owner-operator. Together, these artists work at the center of my conception of the underground, and their techniques deeply inform my understanding of underground emceeing.

The track features several short verse-parts delivered by each of the emcees. Counting at 64 bpm, ELUCID, Ferreira, and woods rap for eight bars at a time, comparable to how jazz musicians may trade fours on a tune. Ferreira’s feature verse enters after ELUCID’s second eight-bar section, accompanied by a drastic change in the musical texture. As Segal layers out the drum loop, he recomposes the original synth-texture chord loop: a Fender Rhodes strikes chords on the downbeats and samples of reversed audio sound a melodic line in between chord hits. Figure 3.3 transcribes the last six bars of Ferreira’s verse, two bars prior to the drum’s re-entry.

Without drums demarcating a clear metrical hierarchy, Ferreira lets his text float around freely in micro-rhythmic space, but he uses rhyming syllables as an anchor for the more lax placement of the intervening text. He places his rhymes in slight anticipation of positions 4 and 12, where the snare drum often hits in a drum loop. This rhyme structure may seem commonplace, but his choice to do so without snare hits helps to orient a listener within the sparse musical texture. When, in bar 31, the drums do re-enter, Ferreira stops rapping new text. Syntactically, his remaining four bars only rely on what

17. According to Ohriner, orientation around these two beats is foundational to the construction of the boom-bap texture pervasive in hip-hop beats (see his discussion of A$AP Rocky’s “Purple Swag: Chapter 2” in Ohriner, Flow, 18). My decision to mark out what seems to be a slower, half-time tempo in “Dead Cars” is based on this orientation normalizes my hearing of the vocal sections as verse-parts rather than full verses.
I hear as two units: “Bronze Kafka metamorph, Black Orpheus set the course / in the Backwoodz, jiggin’ with no remorse.”\textsuperscript{18} The second of the two, a shoutout to his host

\textsuperscript{18} My hearing of the first bar as a full syntactic unit is in part due to his rapping of it within the space of one bar, but it has some semantic justification. I hear “Bronze Kafka” and “Black Orpheus” as two epithets the emcee gives himself—the first a switching the author’s first name Franz out for Bronze; the second, a nod to the 1959 Brazilian film of the same name.
emcees’ label, becomes the textual focus of his shift into a more improvisatory form of vocal delivery. Maintaining the rhythmic position of the final rhyming word “remorse,” Ferreira slightly alters his three repetitions of the phrase: the verb-form *jiggin’* becomes the adjective *jiggy* as Ferreira shifts the metric placement of the first syllable to on-beat in bar 32, position 1, and behind the beat in position 8. Before cycling back to a near direct repetition in bar 33, he accelerates “Backwoodz” from its original position, though still completing his statement as a pickup to the next bar.

For a listener familiar with Ferreira’s style, this textual unit serves as signposting that the verse is coming to a close. When his text becomes fragmented, repetitive, and rhythmically varied, he is telling a listener that he about to finish rapping by employing closing fragmentation. This technique relates to methods of delivering text that signal a change in formal sections theorized by Ben Duinker: fragmentation and repetition can show that the rapper is no longer delivering a verse but instead either a hook or a looser-organized vocal section.19 Constructed from examining form in mainstream hip-hop, Duinker’s categories break down due to Ferreira’s use of the technique within the verse. The rhyme scheme of the fragmented units matches that of the text immediately preceding it (so, too, the metric placement of its rhymes). And though the text’s semantics may be construed as the kind of hype vocal that Duinker identifies, Ferreira locates them within a verse, signalling its close. Closing fragmentation, then, becomes a valuable way to describe how an emcee deploys fragmentation and repetition with a new categorical function.

In my listening, this technique occurs most prominently in Ferreira’s catalog. His influence, however, can be traced by how other emcees use similar methods of sounding a close: members of the Ruby Yacht crew including Pink Navel and S.A.L occasionally use a repeated, closing bar when constructing their own rhymes, and on “Dead Cars,” each of the verse-parts that precede Ferreira’s end with closing fragmentation as well. In each

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19. Duinker, “Song Form and Mainstreaming,” 98–101. Duinker’s definition of hook is discussed on p. 21. His “looser-organized” sections function like a catch all category; he includes “ad-hoc, ametric vocals, skits, or… [rapping] that doesn’t function like a verse or hook” as typical in this section-type.
case, the use of of a comparable technique to signal a close rather than construct a new formal unit problematizes typical formal boundaries in contemporary rap music. These moments change the way listeners engage with textual repetition and therefore textual meaning, constructing a different type of identity narrative around the emcee.

3.4 Performance Techniques

An emcee’s performance of flow demands a slightly different approach to the transcription of a musical object, one which can account more clearly for pitched elements and their interrelation with the beat. Ohriner’s system does not uniformly transcribe verses with pitch, but his more recent scholarship develops a contour-graph notation to track changes in pitch broadly over the range of G2–G4 pitch-space.20

My approach to representing pitch marks a point of departure from Ohriner’s, likely due to conflicting readings of the imperatives about transcription discussed in the prior section. He cites Agawu as justification for looking beyond the confines of standard notation. By contrast, I adamantly believe Agawu suggests music theorists should use standard notation creatively to articulate a complex picture of similarities and differences rap exhibits with a more-familiar repertory in our sphere of discourse. For this reason, my transcriptions in this section harness standard notation diacritically, transcribing rap flows pitched in relation to themselves and other musical elements.21

R.A.P. Ferreira’s “NONCIPHER”

If one were to look through R.A.P. Ferreira’s catalog on any major streaming platform, they would guess that the 2020 LP Purple Moonlight Pages is an artistic debut, but this is not


case. In reality, Ferreira’s career spans the entire preceding decade with a full catalog of releases under various monikers, the most prominent one being Milo. He ties the decision to switch to his own name closely to the concept of identity: “my name is rory allen phillip ferreira. and after 9 years pro rapping i’m confident enuff to put it on what i make. i never knew who milo was.”

Ferreira’s statement—that he now raps in a way deserving of his given name rather than a chosen alias—speaks to the intentional curation of identity that takes place within underground hip-hop.

Along with his persistent use of closing fragmentation noted above, another technique that frequently shows up in his emceeing is vocal mimesis of other elements of the texture. Figure 3.4 examines instances in the second verse of “NONCIPHER” where Ferreira delivers his verse in mimetic dialogue with the alto saxophone, live-tracked by Aaron Shaw. Following a verse that ends in closing fragmentation, Ferreira and Shaw both anticipate m. 30 with syncopated entrances to the next section. Ferreira’s first clause of text (“Dared to peak through the viewfinder”) aligns with Shaw’s performance in both rhythmic placement and pitch contour. The first saxophone lick also informs his delivery of the next unit (“up close with a rude reminder”). The most prominent moment of this first exchanges comes as Ferreira approaches the downbeat of m. 32: he sings the phrase

Figure 3.4: Mimesis in R.A.P. Ferreira’s “NONCIPHER,” 1:20–1:37.

22. See https://twitter.com/yomilo/status/1134513544005849088?s=20&t=nilLSy6nJ3-7JiVRfkP-Lw
“shufflin’ chicken bones” with the same melodic inflection as Shaw, adding a shake to his delivery at the phrase’s end.

After a brief departure from the mimicking the saxophone, Ferreira locks back in with Shaw at the onset of m. 34. Traversing into a higher register to mimic the saxophone’s G5, he raps “[hidden] motives turn to rigor mortis,” descending in relation to but staggered from Shaw’s C minor triad. The lick outlining G to C (m. 34, beat 2) that Shaw delivers gives Ferreira another contour to mimic within the beats that immediately follow: “rigid hortense” ends with a shadow vowel that inflects upwards, and “vivid reminders” sounds its final syllable higher as well. Ferreira approximates the saxophone’s pitch and articulation through the beginning of this verse, mimicking Shaw’s performance.

The rhetorical value these instances relates to Ferreira’s identity as an underground emcee. That he draws the listener into the saxophone melody demonstrates his own musicality: he approaches performing his flow as a musical participant. The beat in this section is not sounding around or behind his flow; instead, he performs his verse as a listener, encouraging a similar engagement from the listener. As a result, the hierarchy between beat and flow changes: the emcee’s performance does not supersede any instrumental stream simply because of its use of text. Instead, the text is fused to the music surrounding it.

**Moor Mother, billy woods, and ELUCID’s “Tiberius”**

An underground emcee’s fusion of text to music also informs the use of processing as a performance technique. Many underground emcees are responsible for not only the construction and performance of their own text but often the means of capturing their voice during the recording process; they often function as lyricists, performers, and many times producers of their own vocals in the song’s mix. Although a quality microphone with some compression, EQ, and reverb works sufficiently for many emcees, others, such as
Moor Mother, explore a wider range of possibilities for what tracking rap vocals entails.\textsuperscript{23} Her verse on the track “Tiberius” featuring ELUCID from \textit{Brass} (2020), her collaborative LP with billy woods, illustrates her more maximal approach to fitting her voice in the musical texture.

Moor Mother’s use of multitracking and effects processing demands a wider conception of the idea of a single “vocal stream” within the beat. Figure 3.5 details the components of her vocal tracking in the first fifteen bars of her verse. Entering during the final bar ELUCID’s verse, she repeats the text he just delivered (“It’s me dummy!”) transition to her own. The channel on which this verse enters (Moor Mother II in the figure) proves to be a secondary, ad-lib track, as a more-prominent vocal enters in the next bar (Moor Mother I in the figure). This vocal channel bifurcates into a lower, primary layer of vocals and one created with a transposition effect, sounding around a fifth higher than the primary layer; the split is represented with normal and diamond head notation.

Moor Mother uses these two vocal channels to deliver the first twelve bars of her verse: a series of questions rapped in a triplet flow pattern that slightly anticipates the beat. The hurried, harsh delivery of her verse crests in mm. 39–41, where she shifts the delivery far enough forward in the groove that the first eighth-note of her tuplet on the text “Catalogue of death and dismay” syncopates before the downbeat. Prior to this rhythmic shift, she adds an echo of the triplet ad-lib on “How long ‘til you break,” panned hard left in the mix and processed with a low-pass EQ filter to diminish its prominence in the mix, shown in Figure 3.5 on an ossia staff below Moor Mother II.

\textsuperscript{23} Although Moor Mother is not credited for as a the producer for “Tiberius” as a beat, she is credited as an executive producer on the LP \textit{Brass} (2020) overall. Given her background as an electronic composer, her involvement in the production of her own vocals is likely.
Figure 3.5: Vocal processing in Moor Mother and billy woods’ “Tiberius,” 1:07–1:37.
In the next three measures, Moor Mother’s use of processing signals a division within her verse—a transition to a new flow and verse-part. Repeating text in a new rhythmic position, she arrives at the question “How much can you bear?” slightly before the downbeat of m. 44. Another echo repeats the text “bear” mid-measure, this time in both vocal channels. Trailing off during the final question “How long is the (wait),” she delivers a guttural “Yeah!” exclamation on the downbeat.

This moment of transition is marked out with effects processing throughout the texture: the synth, which had dropped out upon the textual repeat, now re-enters with a wash of noise while Moor Mother’s textual exclamation is extended through the use of a glitch-like delay. The delay used in this instance increases the frequency of signal repetitions at the same time that it extends the feedback time for the loop, letting the sound of the “Yeah!” repeat more rapidly and extend across the next two bars. This glitch is also foregrounded in the mix through the use of stereoscopic space: the delayed signal “ping-pongs” back and forth between the right and left audio channels.

Once glitched, the function of the exclamation is no longer textual in the way any of the questions preceding it have been. The transformed audio of Moor Mother’s voice carries less semantic weight and functions more abstractly as sound, receding into the mix as she begins the next section of her verse. Throughout the section, Moor Mother’s treatment of her vocals demonstrates that they take on multiple functions. Certainly, they carry the text, and the text carries semantic value, perhaps even poetic meaning for the listener. But the use of several distinct and overlapping vocal signals, each with its own performative subtleties conceptually stratifies “the vocals” as a stream within the musical texture. Her particular approach heightens the voice to become synthetic; each layer’s treatment could be likened to several oscillators used to create a synthesizer patch. Rather than approaching vocal tracking as the creation of several contrapuntal lines, Moor Mother’s audio processing creates heterogeneity within a single “line” of music, likening the voice’s role to any other multitracked musical element in the mix.
3.5 Identity of the Emcee in the Musical Work

Emcees in underground hip-hop engage in every dimension of their work (writing, rapping, and sometimes producing) as a method of constructing their identity as an emcee, which manifests as a literary persona in the rap song as a work. Previously, I argued that this engagement is necessarily collaborative with the beat’s producer and other performers: the beat is the means by which a producer co-author’s an emcee’s identity in underground hip-hop. What this definition does not explicitly foreground how this process is reciprocated—that underground emcees, I believe, wilfully relinquish their role as the singular author of their emceeing persona. The emcee’s identity, then, does not correlate directly to the author of the lyrics, nor even the speaker in their literary text. Rather, it is something shaped by every hand involved in the making of the musical work. An underground emcee draws attention to this fact by engaging listener expectations and democratizing the hierarchy between beat and flow, and some of their methods are doing so are the techniques outlined in this chapter.


Appendix

This appendix contains five tables, the first of which is referenced in Chapter 1 and the remaining four in Chapter 2. The first contains a short list of underground hip-hop tracks throughout the 2010s that make sonic references which function as jazz codes. Organized by release date of the hip-hop track, the table indicates the type of reference (sample or interpolation) as well as the artist and title for both the hip-hop track and its referent.

The tables from the second chapter are expanded “roadmap” transcriptions of each of the four case studies the chapter presents. They differ slightly from the in-chapter tables in their organization: rather than tracking form by bars, they track it by repetitions of samples and loops. Each musical participant gets its own column; samples are named by their sources, while non-sampled loops are given a descriptive word, phrase, or musical term. When samples repeat multiple times within one time code designation, I use a notation that mimics repeat signs in standard notation with a multiplier of the number of repeats if there is more than one (\( \uparrow \uparrow : x \downarrow \downarrow x3, x4, \text{etc.} \)). If that element repeats as is in another section, I use another type of repeat sign to designate that style of repeat (\( \bullet / / \bullet \times 3, x4, \text{etc.} \)). The goal of these roadmap transcriptions is to notate the overall musical texture with a production-forward approach. If a reader would like to compare between this style of notation and the formal designations I opt for in chapter, they need only to match up the time codes given in each table, spotting in to see the musical components within my given formal designation.
<table>
<thead>
<tr>
<th>Year</th>
<th>Track</th>
<th>Referent</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Kendrick Lamar – “Rigamortis”</td>
<td>Willie Jones III - “The Thorn”</td>
<td>Sample</td>
</tr>
<tr>
<td>2012</td>
<td>billy woods (ft. Elucid) – “Sour Grapes”</td>
<td>Miles Davis – “Pharoah’s Dance”</td>
<td>Sample</td>
</tr>
<tr>
<td>2012</td>
<td>billy woods – “Crocodile Tears”</td>
<td>Muddy Waters – “Champagne &amp; Reefer”</td>
<td>Interpolation</td>
</tr>
<tr>
<td>2012</td>
<td>billy woods – “DCMA&quot;</td>
<td>Junior Murvin – “Police and Thieves”</td>
<td>Interpolation</td>
</tr>
<tr>
<td>2012</td>
<td>Kendrick Lamar – “Sing About Me, I’m Dying of Thirst”</td>
<td>Grant Green – “Maybe Tomorrow”</td>
<td>Sample</td>
</tr>
<tr>
<td>2015</td>
<td>Milo (ft. Hemlock Ernst) – “Souvenir”</td>
<td>Shuggie Otis – “Rainy Day”</td>
<td>Sample</td>
</tr>
<tr>
<td>2016</td>
<td>Scallops Hotel – “Niopo Tree Stipend”</td>
<td>Ella Jenkins – “Moon Don’t Go”</td>
<td>Sample</td>
</tr>
<tr>
<td>2016</td>
<td>Scallops Hotel (ft. SB the Moor) – “Lanquidity”</td>
<td>Sun Ra – “Lanquidity”</td>
<td>Sample</td>
</tr>
<tr>
<td>2017</td>
<td>Milo – “Call + Form (Picture)”</td>
<td>Eddie Munji III – “Doon Po Sa Amin”</td>
<td>Sample</td>
</tr>
<tr>
<td>2017</td>
<td>Milo (ft. Elucid) – “Landscaping”</td>
<td>Sun Ra – “Quiet Ecstasy”</td>
<td>Sample</td>
</tr>
<tr>
<td>2017</td>
<td>Scallops Hotel – “Ain’t No Hustle Where I Live”</td>
<td>Stanley Cowell – “Here I Am”</td>
<td>Sample</td>
</tr>
<tr>
<td>2017</td>
<td>Scallops Hotel – “A Beat for My Lil Boy”</td>
<td>Sun Ra – “Where There Is No Sun”</td>
<td>Sample</td>
</tr>
<tr>
<td>2018</td>
<td>Armand Hammer – “VX”</td>
<td>Prince Far I – “Throw Away Your Gun”</td>
<td>Sample</td>
</tr>
<tr>
<td>2018</td>
<td>Armand Hammer – “No Days Off”</td>
<td>Sun Ra Arkestra – “The All of Everything”</td>
<td>Sample</td>
</tr>
<tr>
<td>2018</td>
<td>Milo – “Tiptoe”</td>
<td>Hank Crawford – “Teach Me Tonight”</td>
<td>Sample</td>
</tr>
<tr>
<td>2019</td>
<td>billy woods – “Fnu Lnu”</td>
<td>Hank Crawford – “Wildflower”</td>
<td>Sample</td>
</tr>
</tbody>
</table>

Table A.1: References to jazz, soul, and funk pieces in 2010s underground hip-hop.
<table>
<thead>
<tr>
<th>Timecode</th>
<th>DOOM</th>
<th>Lead Sample</th>
<th>Bass</th>
<th>Drums</th>
<th>Vocal Sample</th>
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<tbody>
<tr>
<td>0:00</td>
<td>&quot;I get no...&quot;</td>
<td>[]::&quot;Huit&quot; I::: x4</td>
<td>[]::&quot;Huit&quot; I::: x4</td>
<td>[]::&quot;Huit&quot; I::: x4</td>
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<tr>
<td>0:15</td>
<td>&quot;I get a...&quot;</td>
<td>•//• x1</td>
<td>•//• x1</td>
<td>•//• x1</td>
<td></td>
</tr>
<tr>
<td>0:18</td>
<td>&quot;brew!&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:20</td>
<td>&quot;There's only...&quot;</td>
<td>[]::&quot;Huit&quot; II:::</td>
<td>[]::&quot;Huit&quot; II:::</td>
<td>[]::&quot;Huit&quot; II:::</td>
<td></td>
</tr>
<tr>
<td>0:41</td>
<td>&quot;Told him tell...&quot;</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td></td>
</tr>
<tr>
<td>1:02</td>
<td>&quot;He went to go...&quot;</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td></td>
</tr>
<tr>
<td>1:22</td>
<td>&quot;(skeezer) eye,...&quot;</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td></td>
</tr>
<tr>
<td>1:43</td>
<td>&quot;Looser than...&quot;</td>
<td>[]::&quot;Huit&quot; I::: x4</td>
<td>[]::&quot;Huit&quot; I::: x4</td>
<td>[]::&quot;Huit&quot; I::: x4</td>
<td></td>
</tr>
<tr>
<td>1:58</td>
<td>&quot;Few could do...&quot;</td>
<td>•//• x1</td>
<td>•//• x1</td>
<td>•//• x1</td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td>&quot;Take it from...&quot;</td>
<td>•//• x1*</td>
<td>•//• x1*</td>
<td>•//• x1*</td>
<td></td>
</tr>
<tr>
<td>2:03</td>
<td>&quot;He plot shows...&quot;</td>
<td>[]::&quot;Huit&quot; II:::</td>
<td>[]::&quot;Huit&quot; II:::</td>
<td>[]::&quot;Huit&quot; II:::</td>
<td></td>
</tr>
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<td>2:24</td>
<td></td>
<td>•//• x2</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td>Spider-man I</td>
</tr>
<tr>
<td>2:45</td>
<td></td>
<td>•//• x2</td>
<td>•//• x2</td>
<td>•//• x2</td>
<td>Spider-man II</td>
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<tr>
<td>3:06</td>
<td>[]::Spider-Man:: x8</td>
<td>SP-303</td>
<td>SP-303</td>
<td>•//• x1*</td>
<td>&quot;Your attempts...&quot;</td>
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<td>3:51</td>
<td></td>
<td>•//• x1*</td>
<td>•//• x1*</td>
<td>•//• x1*</td>
<td>Spider-man III</td>
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<tr>
<td>3:56</td>
<td></td>
<td>•//• x4</td>
<td>•//• x4</td>
<td>•//• x4</td>
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</tbody>
</table>

*choked on last two beats

Table A.2: Full roadmap to MF DOOM and Madlib’s “One Beer”
<table>
<thead>
<tr>
<th>Timecode</th>
<th>Kendrick</th>
<th>Lead Sample</th>
<th>Drums</th>
<th>Bass</th>
<th>Synth</th>
<th>SFX</th>
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<tbody>
<tr>
<td>0:00</td>
<td>“Alright…”*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:11</td>
<td>“Got me…”*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:16</td>
<td>“(bas)tard, I’m Marilyn…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:27</td>
<td>“this is rigor mortis…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:33</td>
<td>“orbit, you an orphan…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:43</td>
<td>“(for)gin’ all my signatures…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:53</td>
<td>“(suit and) tie are suitable…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:59</td>
<td>“(He) dead! Amen! That’s what…”</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1:05</td>
<td>“(Ferra)gami, so many…”</td>
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<td></td>
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<tr>
<td>1:16</td>
<td>“(Wrest)ling? That’s irrelevant…”</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>1:26</td>
<td>“(He) dead! Yup yup! Amen!…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:31</td>
<td>“Got me breathin’…”</td>
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<td>1:43</td>
<td>“Got me breathin’…”</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1:48</td>
<td>“I rapped ‘em and made ‘em…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:58</td>
<td>“my casualty, and it’s casually…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:09</td>
<td>“And I go visit…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:20</td>
<td>“(men)tion, how the far…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:31</td>
<td>“(He) dead! Yup yup! Amen!…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:36</td>
<td>“Got me breathin’…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:42</td>
<td>“(He) dead! Yup yup! Amen!…”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*enters at the 2nd sample repetition
**enters on the last two beats
†sample is choked, shifted, or otherwise altered

Table A.3: Full roadmap to Kendrick Lamar, Willie B, and Sounwave’s “Rigamortis”
<table>
<thead>
<tr>
<th>Timecode</th>
<th>Milo</th>
<th>Drums</th>
<th>Rhodes</th>
<th>Bass I</th>
<th>Synth</th>
<th>Bass II</th>
<th>Vocal Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>“They couldn’t…”*</td>
<td>6-bar halftime</td>
<td>3-chord loop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:12</td>
<td>“(merci)ful, I’m…”</td>
<td>•/•</td>
<td>•/•</td>
<td>•/•</td>
<td>11:</td>
<td>•/•</td>
<td></td>
</tr>
<tr>
<td>0:24</td>
<td>“I might…”</td>
<td>•/•</td>
<td>•/•</td>
<td>•/•</td>
<td>•/•</td>
<td>•/•</td>
<td></td>
</tr>
<tr>
<td>0:36</td>
<td>“evening, I…”</td>
<td>•/•</td>
<td>•/•</td>
<td>•/•</td>
<td>•/•</td>
<td>•/•</td>
<td>Improv**</td>
</tr>
<tr>
<td>0:48</td>
<td>“We all…”</td>
<td>4-bar halftime†</td>
<td>2 chords†</td>
<td>11:</td>
<td>•/•</td>
<td>•/•</td>
<td>Improv</td>
</tr>
<tr>
<td>0:56</td>
<td></td>
<td>4-bar halftime†</td>
<td>1 chord†</td>
<td>•/•</td>
<td>Org samp?</td>
<td>Improv</td>
<td></td>
</tr>
<tr>
<td>1:06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Soul Caliber 2

Table A.4: Full roadmap to Milo and Kenny Segal’s “Rabblerouse”

*Entrance at bar 4 with C#7sus4

**Entrance anticipates downbeat

†Sample is choked, glitched, or otherwise altered
<table>
<thead>
<tr>
<th>Timecode</th>
<th>billy woods</th>
<th>Guitar</th>
<th>Omnichord</th>
<th>Drums</th>
<th>Synth</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td></td>
<td>G5 F#5 G5 F#5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:07</td>
<td></td>
<td></td>
<td></td>
<td>: G5 F#5 G5 F#5 :</td>
<td></td>
</tr>
<tr>
<td>0:26</td>
<td>“If I haven’t…”*</td>
<td>• // •*</td>
<td></td>
<td></td>
<td>Lead*</td>
</tr>
<tr>
<td>0:40</td>
<td>“Pencil him in…”*</td>
<td></td>
<td></td>
<td>: Gm F#M Gm F#M :</td>
<td></td>
</tr>
<tr>
<td>0:53</td>
<td>“While Shameek…”*</td>
<td>• // •</td>
<td></td>
<td>• // •</td>
<td></td>
</tr>
<tr>
<td>1:07</td>
<td>“Shot the movie…”*</td>
<td></td>
<td></td>
<td>: G5 F#5 G5 F#5 :</td>
<td></td>
</tr>
<tr>
<td>1:20</td>
<td>“Whitey finally…”*</td>
<td>• // •*</td>
<td></td>
<td></td>
<td>• // •</td>
</tr>
<tr>
<td>1:33</td>
<td>“Dish served…”</td>
<td>G5 F#5 G5 F#5</td>
<td>• // •*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:40</td>
<td>“Grip!”</td>
<td>Gm F#M Gm F#M*</td>
<td>Snare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:53</td>
<td>“Pace the palace…”*</td>
<td></td>
<td></td>
<td>: G5 F#5 G5 F#5 :</td>
<td></td>
</tr>
<tr>
<td>2:10</td>
<td>“Not a blink!”</td>
<td>Gm F#M Gm F#M*</td>
<td>Snare**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 2:20     | “My goals was…”* | ||: G5 F#5 G5 F#5 :||* | Full Kit* | • // •+
| 2:36     | “Freaky shit…”* | • // •* |           |       | • // • |
| 2:50     | “No sweat…”* | • // •* |           | • // •* | • // •** |
| 3:03     | “Unimpressed…”* | • // •* |           | • // • |       |

*Enters in previous region with an anacrusis
** Layered in after downbeat
†loop is glitched

Table A.5: Full roadmap to billy woods and Kenny Segal’s “Checkpoints”