Making *Dope Shit*

How Does One Learn (about) Flow? And (How) Can It Be Done in a Formalized Education Setting?[1]

Kjell Andreas Oddekalv

Abstract *With Hip-Hop being perhaps the dominant aesthetic flavouring of popular music and general culture in the 2020s, it is inevitably finding its way into formalised educational settings. This chapter presents methodological tools for the analysis of flow—rap's rhythmic structure—and suggests how this type of analysis can be utilised in higher education. Some of Hip-Hop's cultural tenets, like "keeping it real" and a focus on individual expression and "not biting" might seem at odds with the typical structures of formalised music education, and the chapter foregrounds these discussions. Hip-Hop's cultural and social values are intimately connected with its aesthetics, all the way down to the organisation of the tiniest rhythmic units in a rap flow, and this chapter provides educators with a toolbox capable of letting students unpack what makes the shit dope, and in turn make some dope shit themselves.*

Introduction

Flow—"The Rhythmic Voice in Rap Music" (Ohriner 2019); "the song a rapper's speech sings" (Bradley 2009: 9); the "ability to move easily and powerfully through complex lyrics, as well as of the flow in the music" (Rose 1994: 39); or more matter-of-factly "the rhythmic delivery of MCing" (Kautny 2015: 103)—is one of many foundational concepts within the Hip-Hop element *emceeing*. It's rich with meanings, connotations, layers, and apparent contradictions that are, in reality, deeply meaningful. This simple one-syllable word evokes references to overarching flow *styles* that can be personal or tied to group (geographic, subgenre, etc.; see, for example, Krims 2000); flow *types* characterized by musical parameters such as "triplet flow" (Duinker 2019) or "stutter rap" (Komaniecki 2019: 33); and the quite concrete musical rhythm and form of the words and rhymes in a specific piece of rap.[2] For the purposes of analyzing, learning, and teaching flow, which is the main topic of this chapter, it is the latter understanding of the term that should be taken as the default meaning. However, it should be stressed that when the term is encountered "in the wild," it contains all these aspects—and more—to some degree or other (see also Kautny in this volume).

As for Hip-Hop and music education, the questions around flow as concrete musical rhythmic structure are multiple and multifaceted. The ability to flow—or more modestly/realistically *the ability to create rap flows* by phrasing and structuring words, syllables, vocables, and rhymes in a way that is stylistically appropriate—is a *learned* skill. Can we as educators facilitate this learning in our students? Can it be *taught*? Perhaps more pressing: *should* it be taught? Is it culturally appropriate? What do we do to and say about Hip-Hop by institutionalizing emceeing? In this chapter, I will make the argument that it *can* be taught, and I will raise and discuss some questions about potential dangers and implications educators should be aware of and reflect upon. Building on my own experience as a rap analyst, emcee, and university music educator,[3] I will present flow's multiple interacting levels of rhythmic form and structure and relate them to essential rhythmic techniques. I will argue for musical analysis as a performative act and as a tool for learning—here, specifically, at an

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2   For an extended discussion on the term, its variants and epistemological implications see Oddekalv (2022b: 7–18).

3   The author has been (and is at the time of writing) an active recording and performing Hip-Hop artist in the Norwegian group Sinsenfist.

academic/higher secondary education (university and high school) level.[4] And to briefly conclude, I will then discuss *what makes shit dope*, and how the central aesthetic aspects of rap (and Hip-Hop and other Black art forms) are intimately connected to Black cultural heritage and progressive social values—something I believe is one of the better arguments for "teaching rap" in educational institutions and to people from outside "the culture."

Learning (about) Flow

The idea of flow being a learnable skill is not uncontroversial. In a public panel conversation in conjunction with the launch of the book *Flytsoner: studiar i flow og rap-lyrikk* (Flow zones: studies in flow and rap lyrics; Diesen, Markussen, and Oddekalv 2022), rapper Linni said "it's never something that's being learned, and it happens instinctively" (NTNU Samfunns- og utdanningsvitenskap 2023: at 35:22), when prompted to muse about the word "flow." However, he added that a definition of flow as an interplay between musical rhythm and speech rhythm (which was given as part of an introduction to the topic) is a good one "when one is listening to a track and thinking about flow" (ibid.: 35:40). A rapper's own rhythmic repertoire and personal expression should not be the subject of too much conscious reflection, and one does not "rehearse" flow, as another panelist, Jaa9, states later in the conversation: "if one would come to a session and say, 'I've rehearsed a cool flow'—that would be looked down upon" (ibid.: at 41:43). Of course, rappers have built up their rhythmic repertoire by (most often first) listening to *a lot* of rap music and writing, recording, and performing their own verses and songs, and Linni and Jaa9 state this clearly too. But it is interesting how—unlike for most other professional instrumentalists—it seems culturally inappropriate for rappers to systematically learn or "transcribe" other rappers' verses to build vocabulary. The "proper" way of internalizing the tradition's rhythmic language seems to be through subconscious osmosis, where analytical reflection should be actively subdued.

Of course, this specific way of encoding the cultural tenet of "keeping it real" deserves some pushback and unpacking. There are certainly rappers who are open about having an analytical mindset while engaging with other rappers' flows. For example, Norwegian rapper, Runar Gudnason, wrote about

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4   Similar arguments and related explorations from the Hip-Hop practice of sample-based music production can be found in Exarchos (2018).

how he superimposes other rappers' flows onto his own organizing mental schema when listening to/studying their tracks.[5] While it is certainly imperative to uphold the ideals of originality and individual expression and to avoid "biting" (copying a style or song), "keeping it real" can easily be misconstrued as a gatekeeping tool to "mystify" the acquisition of vocabulary for fledgling rappers. While the concrete transcription, analysis, and rehearsing of others' flows might well feel contrived and not "real," the application of an analytical mindset towards *one's own material* is something that seems more common amongst rappers than it might seem from the keeping-it-real discourse. To take my own "learning biography" as an example, something really "clicked" when I first began jotting down rhythmic details along the lyrics in my notebook on the many "transit writing sessions" (on the bus, train, metro, or airplane) where I was not able (or at least would have found it socially awkward to) to rap out loud over a beat. In Paul Edwards' seminal "How to Rap: The Art and Science of the Hip-Hop MC" (2009), many of the interviewed emcees explain in varying degrees of detail how they include rhythmic and performative details or cues in their writing process. I will argue that engaging an analytical mindset and employing analytical practices such as transcription to others' music is one of the best ways to develop one's own musical vocabulary, and—if anything—to reflect upon how learning from and being inspired by others might safeguard against unconsciously "biting another's' style." In an academic or higher education setting, where students and analysts will inevitably have varying exposure to Hip-Hop culture and rap practice, these analytical practices and modes of reflection can be particularly valuable.

Interestingly, the near-codification of the individual rapper's "authentic" voice "uncontaminated" by structured, intellectual study starkly contrasts with the way in which beatmaking practice is culturally coded. Video tutorials and educational livestreams for beatmaking have proliferated in web communities such as YouTube and Twitch, and practices such as reverse engineering hit tracks and showcasing common techniques are ubiquitous. While educational beatmaking content attracts millions of views spread amongst a huge host of so-called content creators, very few individuals make similarly educational content about rapping.[6] And while it might seem natural to consider

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5   See Oddekalv (2022b: 70–71) for an extended Norwegian translation and discussion.

6   A rare and notable exception is Aotearoa New Zealand–based, UK-born Nigerian artist/educator Mazbou Q, whose TikTok account has proved that well-made educational content on rap can most certainly go viral.

rapping to be a musical practice like any other, and that the strategies for learning and developing the skills and repertoire of the tradition could be the same as for a metal guitarist, jazz trombonist, or gospel singer—we as music educators should reflect on why there is sociocultural pushback against "copying" vocabulary in Hip-Hop. The interconnectedness of rap's constituents—for example divided into *content*, *flow*, and *delivery* (which also includes melody/pitch content, a parameter whose significance is often rarely discussed) like in Edwards (2009)—means that it is particularly crucial to reflect upon how a rapper's musical voice is intimately connected to their person, the stories they tell, and their cultural background. Hip-Hop "foregrounds identity" (Krims 2000: 9) more than any other mainstream art form, and there is no doubt that *keeping it real* is a guiding principle behind why any explicit reference to where one's rhythmic vocabulary stems from is a Hip-Hop faux pas—fundamentally *wack*. Kruse (2018) brings up these issues as regards Hip-Hop in the classroom, discussing how to "confront Hip-Hop authenticity" in ways that are socially/culturally responsible and meaningful for students. (On this point, see also Ethan Hein and Toni Blackman's chapter in this volume.)

To foreground and stress the importance of these fundamental issues of Hip-Hop's cultural values, cultural appropriation, and exploitation, I would urge educators (particularly those that to some degree or other are "outsiders" to Hip-Hop culture[7]) to begin any "learning rap" class with an open discussion, ideally discussing difficult cases, such as "the problem of the white rap cover" covered (pun intended) by Hein (2020).[8] On the surface, it might seem that there are so many potential pitfalls for White educators and non-hip-hoppers wrestling with rap music that it would be safest to avoid it altogether. But that would be a grave mistake. Hip-Hop is the leading idiom of mainstream

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7   I would strongly push back against any sort of "Hip-Hop purism" dictating who can or cannot engage with or teach Hip-Hop. That said, there are certain aspects of the culture which are clearly felt or understood differently depending on one's background. As a White man, I have no lived Black experience; as a Norwegian, I have no true understanding of Hip-Hop's roots in the Bronx, the United States, or the Black Atlantic. Still, I would argue that this does not disqualify me from considering myself a part of Hip-Hop culture—and indeed that the ways in which I am an "outsider" (cultural background, etc.) are equally important, albeit in different ways, than those that make me an "insider" (history of listening, practice, reading, involvement in various communities).

8   I consider Hein's article an obligatory reading for any White educator teaching the performance/making of rap.

art—meaning that students (of any nationality and background) are not only interested in it but have been raised on and molded by it—and it would be seriously negligent for music educators to not engage with and attempt to understand such an important cultural influence and movement. As chronicled by Greg Tate (2003), there is a history of White people wanting to take on "everything but the burden" of Black culture. This is something we (meaning White educators) should aim to combat. As Hein and Blackman puts it "Before Hip-Hop music educators can identify practical approaches to teaching Hip-Hop, we believe that they must first ask how to do so without doing violence to the music and its meanings, and indeed, whether such a thing is even possible" (this volume). Looking at our own communities and their engagement with Hip-Hop, we should reflect on if and how violence is being done to the music and its meanings, and do our part in tearing down colonialist structures and educate our communities about Hip-Hop's values.

As for learning/making/transcribing/copying/decoding flow, Eileen Southern makes the point that "serious study of African-American music requires getting to know the music, which means listening to it and, if possible, performing it" (1997: xx). This "serious study" through listening and performing (that is, by embodying the musical practice, and not necessarily getting on stage in front of an audience) is clearly what emcees have been doing for decades. However, while a blues guitarist might learn and perform an entire B.B. King track—meticulously working on getting each bend right—an emcee will from the very beginning *write* their own lines. Heeding Southern's call for performance for learning rap means that educators should encourage students to create their own original material and foster an environment conducive to doing so, while also stressing the performative nature of analysis. Kofi Agawu argues that "analysis is like performance and also like composition" (2004: 279), and in encouraging an analytical approach and an analytical mindset for students, we, as educators, are able to nurture these fundamentally creative and pleasurable aspects of the learning experience. The knowledge and skills imparted by analysis are only positive by-products of the process; "the more fundamental motivation [for analysis] lies in the desire to inhabit temporarily a certain sonic world—and to enjoy the sensuous pleasure of so doing" (Agawu 2004: 274–275).

Analyzing Flow

The field of rap analysis is populated by scholars and publications from many different disciplines, following various approaches. Along with musicologists (here I include those who would be called "music theorists" and "ethnomusicologists" in the United States), literary scholars and linguists are the most prolific, and the study of flow in particular is often a fundamentally interdisciplinary affair. While flow is a feature in analyses of all music with lyrics, it is particularly important for rap, as certain parameters—such as rhyme and syllable stress or prosody—are especially significant for rap's rhythmic and formal structure. In exemplifying analytical approaches and rhythmic techniques in this chapter, I will primarily draw upon my own extensive work in my 2022 dissertation "What Makes the Shit Dope? The Techniques and Analysis of Rap Flows" (Oddekalv 2022b).

Every listener and every *listening* are unlike any other. Music is a temporal art form, and while we inevitably attempt to inscribe and represent music in timeless form—words on pages, musical notation, figures, and images—what must never be forgotten is that music always unfolds through time. It *flows* forward. For the purposes of learning flow and stressing the performative dimension of analysis, I believe it makes sense to start with a foundational question—*what makes the shit dope?* Finding and dwelling on the moments that fascinate us is fundamental analysis in itself, and while there is much value in more statistical and overarching studies of rap's global features,[9] I do not think this is where one should start when encouraging students to become analysts themselves. Zooming gradually inwards on individual flows, passages, lines, rhythms, and moments also invite different tools, approaches, and theoretical orientations, and I will present a selection here. If one were to consider the following section as a blueprint or suggestion for topics/methods for a class focused on learning flow, I would recommend spending the most time on the first topic, and progressively less on the subsequent, slightly more intricate concepts.

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9   The study of rap's global features is often done using corpus studies, of which many have been published. See, for example, Condit-Schultz (2016), Ohriner (2016), Hirjee and Brown (2010), Katz (2008; 2015), Duinker and Martin (2017), and Gilbers et al. (2019).

Line-Bar Interactions—Phrasing on/in Meter

Whenever anyone puts rap into written form, whether it be in a creative writing process (in the—somewhat romanticized—notebook or, more commonly, on a smartphone) or through transcribing a favorite verse, the placement of line breaks quickly reveals its structural significance. Fundamentally, the division of text into *lines* is what "defines poetry" and "distinguishes all poetry from prose" (Fabb, Halle, and Piera 2008: 1), and most literary analyses of rap is clear on defining rap as a form of poetry (Perry 2004; Pate 2010; Bradley 2009). The structuring of poetic lines within a musical metrical framework of bars and larger units comprised of (most often) symmetrical groupings of bars, typically coinciding with the structure of the musical background—"the beat" in Hip-Hop vernacular (not to be confused with the rhythmic pulse unit sharing the label)—has been the subject of analytical scrutiny by many a rap analyst (see, for instance, Condit-Schultz 2016; Ohriner 2016; Katz 2008; 2015; Mattessich 2019; Adams 2020; Duinker 2021). Most commonly, a poetic line will coincide with a musical bar, but there is great room for variation—and the variations against the norm are often foundational to the aesthetic of a flow. Many common techniques that are part of the rhythmic vocabulary of rappers from different eras and different scenes are based on line-bar interactions.

There are some important considerations as to what constitutes a *line*, and how this structural unit is experienced by listeners. Again, this is primarily due to a flow's continuous unfolding through time. Nigel Fabb makes the argument that lineation (the division of text into lines) is an *implied form* (2002: 136), and that there are multiple different types of *evidence for lineation* that in combination reveals the "dominant lineation" of a text. For printed poetry, the graphic line is only one type of (strong) evidence for lineation, and "inferences about lineation need more than one type of evidence" (ibid.: 137). Such evidence could be, for example, (poetic) meter, grammatical syntax, relative length, and stylistic convention. For many styles of poetry and rap in particular, *rhyme* is a strong type of evidence. As rap is not printed poetry, the graphic line is not an available structuring parameter for a listener, so we rely on other types of evidence. While the convention of the line-bar coincidence has been a part of rap since its very inception, I argue elsewhere (Oddekalv 2022a) that musical meter is not particularly strong evidence for lineation in itself (although the convention is, to a certain degree). Rather, (primary) rhyme and grammatical syntax are much stronger indicators of a potential line break. It is important to keep in mind that lineation is often either ambiguous or continuously influenced by

the presence of alternative lineations that are weak, or at least weaker than the dominant ones. And as the flow gradually reveals itself, a listener will interpret, anticipate, and reinterpret the dominant lineation. This is an important factor in the overall aesthetic expression of a rap flow.

Beginning with a simple transcription of the lyrics, one should encourage students to reflect on what influences their choices of graphic line breaks. Figure 1 shows an example from an excerpt of CHIKA's "SONGS ABOUT YOU" (2019), highlighting some types of evidence for lineation.

I sound too fuckin' pressed, man, let's backtrack
The accolades, I have that
Could be 1 long line?

The pressure fuckin' stacked at the weight of a gravel backpack
And shit I wrote a month ago, outdated just like snapbacks
And Seven told me if I want that body, I can snap back
And go'n' attack rap and hit 'em so hard they wonder what happened
No cappin', hoes lackin', I said it, what's crackin'?
Could be divided differently?
I set the precedent, at this point I'm your president
Now, how you sick as me, but come and function as the medicine?

Fig. 1: Transcription of part of verse two from CHIKA's "SONGS ABOUT YOU" (2019, from 1:58) with highlighted evidence for lineation. Different primary rhymes underlined in red, blue, and brown, with potential alternate lineations demarcated by green bracket/stippled lines.

As can be seen in the figure, the lineation of the initial transcription lines up with a combination of grammatical syntax and primary rhyme position. Every line ending is after a complete sentence and a (multisyllable) rhyme instance. Notice the potentially ambiguous lineations in the first two lines and in the sixth and seventh. As lines one and two are the first of the section, any patterns of additional evidence for lineation such as *similarity of length* and *structural similarity* (here: two sets of primary rhyme instances in each line, positioned at beats 2 and 4) have not yet been established for the listener. Until "have that" appears, "backtrack" is not yet a rhyme, and the syntax and breathing pause in CHIKA's delivery suggest a line break, which perhaps is reinterpreted after the

full two-bar line pair is finished (after "backpack"). In lines six and seven, the change of primary rhyme is a complicating factor, as is the change in CHIKA's delivery mode from rapped to sung and the lack of a rhyme on "so hard" (which we might be induced to expect by syntax and phrasing). Here, I chose to inter-pret/transcribe the sixth line as one long(er) syntactical unit, but placing line breaks after "so hard" and "happened" also aligns with closed syntactical units and is a perfectly feasible interpretation.

Continuing the analysis, the relationship between lines and bars (musical meter) highlights how the flow uses variations against the convention of the line-bar coincidence to challenge a listener's expectations and create imbal-ances and ambiguity. I suggest using only a quite rough demarcation of beat positions and superimposing a visualization of the lines on a musical metrical grid, as shown in Figure 2.
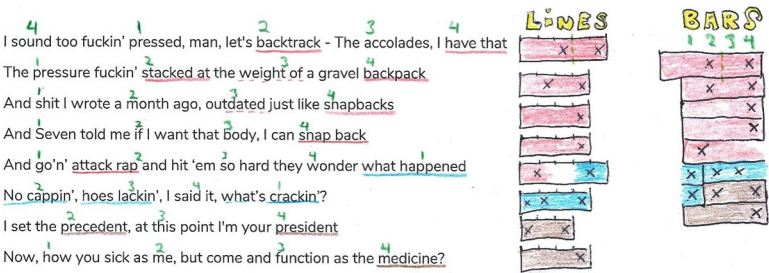

Fig. 2: *Line-bar interactions in an excerpt from "SONGS ABOUT YOU." Beat num-bers in green, primary rhymes underlined in red, blue, and brown. Line graphs colored corresponding to rhyme complexes and organized as lines and superimposed on musi-cal meter respectively, with primary rhyme positions indicated by crosses.*

The visualization of lines and how they fit over the musical meter showcase certain patterns, such as the aforementioned two primary rhymes on two and four of lines one and two, as well as a section of *one-rhyming*—the placement of a primary rhyme on beat one rather than the more conventional beat four (Oddekalv 2022a: 242–243; 2022b: 137–144)—in the lines ending on the one of bars six and seven. Techniques such as these, and how rappers play with rhyme density and structural conventions, are the first I would introduce students to when they begin analyzing flow. I would suggest that analysis of (the position

of) primary rhymes, *rhyme complexes* (a section dominated by a particular rhyme class; see Krims 2000: 43), and the symmetry or lack of symmetry of groups of bars/lines is the main focus rather than specific rhythmic phrasing.

Stress Interactions—(Quantized) Rhythmic Surface Structure

Zooming in to the rhythmic structure of syllable placement is the next step in analyzing rap flows. The ways in which stressed syllables are placed on unstressed metrical positions and the patterns created by syllable stress is a prime analytical concern for rappers and rap scholars, and here, too, the interactions between the framework of the musical rhythm and the poetic/linguistic rhythms are what creates and defines rap's rhythmic language.
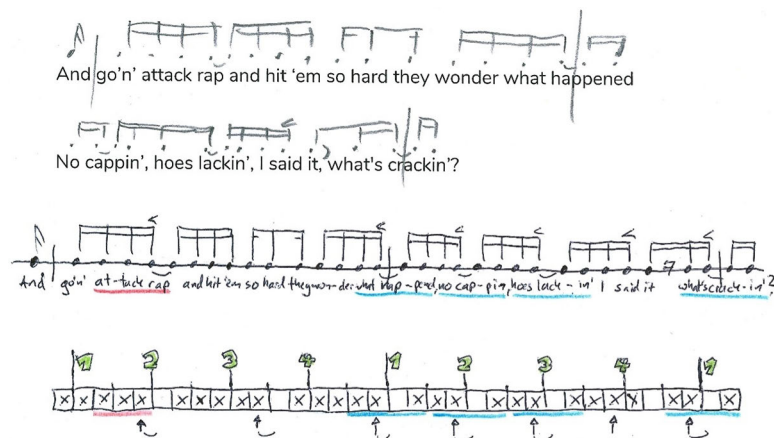

Fig. 3: Transcriptions of an excerpt from CHIKA's "SONGS ABOUT YOU" (2019, starting at 2:11).

In analyzing this level, various considerations inform how detailed the transcription needs to be. Transcribing entire verses can be highly informative (and I would recommend that students do so—particularly as it offers excellent ear training), but often analysis is better served by identifying specific passages/sections and transcribing only those into musical notation or a grid-based system. Depending on the analyst's proficiency, the potential

readership of the analysis, and/or which rhythmic features are to be analyzed, these systems can be used interchangeably. Figure 3 shows how I work when transcribing a section of flow and how the transcription looks when "cleaned up" in musical notation and a grid-based representation, respectively.

As the figure illustrates, my own transcription process is based on traditional music notation, largely because I am proficient in and comfortable with this system. It is also the method I initially used to notate rap when I was working out the details of some of my own flows during the writing process (while writing on the bus/train/plane and not wanting to bother other passengers). I advocate using music notation with students as well, as it proves to be both a flexible and surprisingly straightforward system when (musical) pitch is not a factor. However, the choice of system should be adapted to what both the student group and the teacher are comfortable with.

The "cleaned up" transcriptions showcase the rhythmic feature most prominent in this section: the consistent syncopation of the primary rhyme motifs. Here again, whether this is most easily discernable in the music notation or the grid system depends on one's proficiency, but both systems effectively capture the nuances in emphasis. For the grid-based system, I prefer to include clear references to the musical meter and the hierarchy of subdivisions, with beats and the relatively "heavy" (metrically stressed) eighth-note positions indicated. I use visuals aids such as arrows, dots or crosses (any such mark will do) to mark instances where a stressed syllable has been placed on a metrically weak sixteenth-note position. For the excerpt shown in Figure 3, I added a small slur on the sustained syncopated syllable, indicating that no syllable follows in the subsequent sixteenth-note box. This creates a contrast to the one instance of a stressed syllable in a metrically weak position that *is* followed by another syllable—an unstressed one in a metrically strong position—whose rhythmic effect is quite different and warrants reflection.

Many lessons can be taken from an excerpt like this. For example, it demonstrates how rap rhymes almost always "rhyme rhythmically" as well as phonetically (Komaniecki 2019: 46), or how the repeated syncopations create a "tendency towards cross-rhythm" (Danielsen 2006: 62). The relationship between musical background and flow can be explored in detail, particularly when using a grid-based setup, and other types of more or less consistent rhythmic patterns can be analyzed, as Ohriner (2019) does with his concept of "vocal groove."

Microrhythm—Timing and Degrees of Ambiguity

One area that many rap scholars advocate studying is the rhythmic phrasing "below" (or even "between") the quantized rhythmic units of beat subdivisions. Much has been written on how "hip-hop music resists traditional modes of musical analysis" (Adams 2015: 118), and how its elusive magic rests in "expressive timing" (see Ohriner 2018, Duinker 2022), swing, and microrhythmic phrasing in general.[10] To a certain degree, this sentiment is warranted—microrhythmic analysis has much to unpack, and microrhythmic phrasing is certainly an integral piece of rap's aesthetic puzzle. However, there is no need to throw the baby out with the proverbial bathwater and focus primarily on microrhythmic analysis to decipher rap's rhythmic language. Not that anyone is advocating this, of course, but a rhetoric implying that microrhythm holds particular importance, and that a lack of microrhythmic analysis is the reason why rap has not been satisfactorily understood, is just as reductive as leaving it out of the equation entirely. There are many different microrhythmic features in a rap flow that can be relevant to analyze (although some might consider phrasing at a subquantized level part of "delivery" rather than flow; see, for example, Edwards 2009: 256–257), and different methods of measurement and interpretation are suitable for different features. General tendencies in microrhythmic phrasing—such as the "laidback" lagging behind the beat of Snoop Dogg or Big Boi's seemingly unsystematic speech-like phrasing—are important characteristics of a rapper's personal rhythmic style. However, I do not believe students should conduct the types of broad, zoomed-out global feature analyses that quantify such tendencies. Rather, for students to better understand flow, I advocate analyzing passages where microrhythmic phrasing creates ambiguity regarding the quantized rhythmic structure. Microrhythmic analysis, in other words, should be done in tandem with the analysis of quantized transcription.

Measuring the exact position of a syllable is not necessarily a straightforward process, and substantial research efforts have gone into exploring the position and variability of different sounds' *perceptual center*(s) ("p-center")

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10   I use the term "microrhythmic phrasing" to make a distinction both between "micro-timing" which is strictly temporal and "microrhythm" which encompasses other sonic features than onset positions (see Câmara 2021 for an extended discussion), and between microrhythmic phrasing that is *structural* and not strictly *expressive* (Oddekalv 2022b: 118–122).

amongst different listeners (see, for example, Danielsen et al. 2019). One consequence is that any microrhythmic analysis inherently involves fundamental epistemological choices. Using only software-measured onsets creates "objectivity," but at the cost of compromising fidelity to the analyst's perception. A subjective interpretation of p-center positions, by contrast, means that other analysts cannot (exactly) reproduce the analysis, but it does preserve important dimensions of analysis focused on performative (and subjective and interpretative) acts. I advocate for this latter approach. In this process, an analyst zooms in on waveforms and spectrograms, repeatedly listening to single syllables and slowing the audio down to place individual p-centers and compare them to a ruler of some sort, be it a mechanically quantized grid like in most DAWs or the p-centers or beat bins, of the compound rhythmic events in the musical background (see Danielsen 2010; 2018; Haugen and Danielsen 2020). And this procedure is not just a methodological step, but a valuable exercise in its own right.

Figures 4 and 5 show examples of microrhythmic analysis from my dissertation (Oddekalv 2022b), both of which home in on the interaction between musical background/metrical frame of reference and the microrhythmic phrasing of the rap.

Figure 4 shows an edited snapshot of the analytical working process, using waveforms and spectrograms of separate tracks from a recording (obtained directly from the artists through the project TIME—Timing and Sound in Musical Microrhythm at the University of Oslo). Note that there are no exact syllable p-centers indicated in the illustration (while the less ambiguous drum hits are marked). Yet it should be visually apparent (at least to someone proficient working in a DAW) that the syllables mostly do not line up with the obvious subdivision positions. And yet that does not stop the listener from interpreting the rhythmic structure "as" (cognitively) quantized rhythmic units.

Figure 5 is an example of a microrhythmic analysis transformed into a different visual representation. The gridded line in the middle of figure represents a (straight/not swung) sixteenth-note grid, and the red dots indicate the (quite precise, though still subjective/interpreted/approximate) syllable p-centers. The purpose of this particular analysis is to show how the different layers/musical streams can give conflicting metrical cues to a listener. Here, the metrical anchor (a stressed syllable functioning as a marker of a metrical beat) "-dur-" presents a "downbeat" much later than the downbeat position indicated by the musical background.
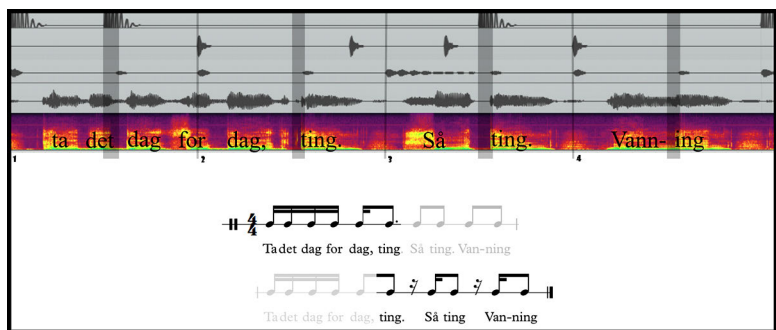
Fig. 4: *Waveform and spectrogram analysis and transcription of rhythmic ambiguity—"bothness" (a rhythmic event invites first one structural interpretation before requiring a reinterpretation—both interpretations are part of the listening experience)—in Neste Planet's "Eple" (2018, starting at 0:53). Cited from Oddekalv (2022b: 193).*
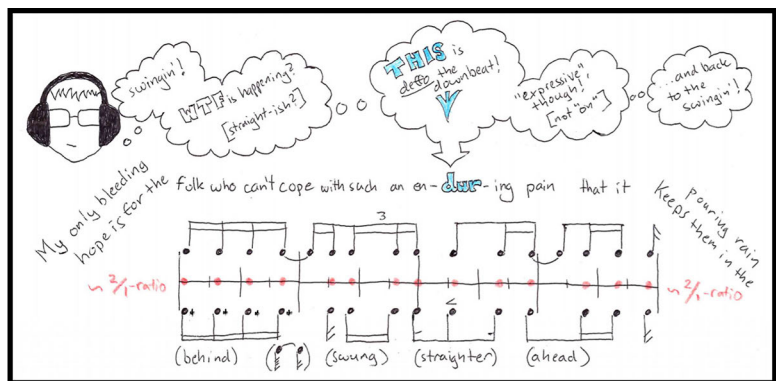

Fig. 5: *Microrhythmic analysis and example of a listener's interpretation of an excerpt from Lisa "Left Eye" Lopes's verse on TLC's "Waterfalls" (1994, starting at 3:31). Cited from Oddekalv (2022b: 183).*

Extended microrhythmic analyses can be nuanced and intricate and are probably not where one should focus the most time in a class devoted to learning flow. This section of the present essay is thus intended as a short teaser of

the subject, with an invitation to refer to the original source (Oddekalv 2022b, track B3) for a deeper dive into microrhythmic analysis of rap.

What Makes the Shit Dope?

The three levels of rhythmic analysis presented above are only some of the topics one might touch on when analyzing flow. If I were to live the dream of designing an entire rap analysis/performance module, other mandatory topics would include melodic analysis and production/arranging of vocal layers, for example. For educators looking to get inspired, the most important takeaway should be the focus on analysis as a creative and performative process. The question students (and educators) should ask themselves is "what makes the shit dope?" and they should trust their own aesthetic preferences in identifying focus areas for analysis.

A common thread throughout the examples in this chapter is that standout moments in flows revolve around some sort of ambiguity—"friction" between rhythmic or formal layers or hints or tendencies towards some sort of parallel rhythmic structure competing or interacting with the main metrical framework. I encourage reflection on this tendency and urge educators to make connections between rap's cultural heritage and social values—including nudging students towards the same types of reflection without spelling it out, so to say. Tricia Rose identifies three aspects—*flow, layering*, and *ruptures in line*—as foundational for Black art (Rose 1994: 37). Think of how these aspects are evident in the art of Signifyin(g) (Gates 1989), another concept that permeates Hip-Hop and other Black art forms. The aesthetics of Black art are intimately connected with the history and culture in which they originate, and it is no coincidence that proficiency in manipulating and maneuvering layers of meaning, form, and structure develops amongst those of a "double consciousness" (Du Bois 1903). Many scholars have explored these connections between aesthetics and cultural values in depth (see, for example, Moten 2003 and Perry 2004), and as Hip-Hop conquers the world, the interconnectedness between social and aesthetic dimensions of the practice is evident outside of the American context, as well (see Rollefson 2017). Think of how the layered poetic lines and musical bars flow forward in parallel, while sometimes rupturing at diverging moments; how the cross-rhythmic tendencies evoked by the positioning of stressed syllables in unstressed metrical positions hint towards layered rhythmic patterns in symbiotic competition; how the performative

phrasing of timing-cognizant emcees can make a beat feel wider/longer or even present at two different "places" at once; and how the layered meanings and Signifyin(g) in the lyrics can express multiple stories, histories, cultural references, and emotions that might not even be intuitively related (yet they are). Getting a feel for what makes the shit dope inevitably requires insight into the cultural heritage and inherent values of Hip-Hop—or at the very least, students of Hip-Hop music will develop skills that might aid in understanding and adopting these values. In a way, the order is flipped. While young European students might not come to Hip-Hop through their cultural background, the cultural and social values Hip-Hop contains might come to them through their engagement with its aesthetics.

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