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Making Records within Records: Manufacturing Phonographic 'Otherness' in Sample-based Hip Hop Production

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ABSTRACT

Borne out of a wider exploration of hip hop music practices that substitute copyrighted samples with the creation of original source content, the chapter questions what qualities render new sonic constructs into phonographic objects that are aesthetically desirable for—and usable in the context of—sample-based hip hop record production. Furthermore, if all digital audio recording can be described as a form of sampling, then what mechanisms, processes, and practices imbue sonic signatures of phonographic 'otherness' into these objects, and how can this 'otherness' be defined? Extending beyond a deterministic approach that simply maps signal flow variables to the forging of phonographic signatures, the chapter deploys an autoethnographic approach to illustrate the effect of phonographic 'context' on contemporary beat-making. By synthesizing the technical with the aesthetic, the chapter uncovers nuanced mixing phenomena at the heart of how this 'otherness' is negotiated and constructed in practice, extending our understanding of record production as (a form of material) composition.

1. INTRODUCTION

Charles Mudede (2003) explains that in the context of Hip Hop "a turntable is forced to [...] make meta-music (music about music) instead of playing previously recorded music", and expands that the sampler is "repurposed to turn one DJ repurposing two turntables into a thousand mini DJs repurposing two thousand virtual, mini turntables". Looking at sample-based record production through such a lens highlights both the theoretical complexities inherent in pursuing a comprehensive musicological understanding of the artform, as well as the material implications this poses for its practitioners, who continue to explore alternatives to copyrighted samples as their source material. Alongside the numerous creative approaches that out of legal and financial necessity sprung out in hip hop practice in the early 1990s1, resorting to sample *construction* brings about its own set of poetic-aesthetic issues (see, for example, Exarchos, 2019). The predicament is accurately resounded by The Bomb Squad's Hank Shocklee in the following interview excerpt:

We were forced to start using different organic instruments, but you can't really get the right kind of compression that way. A guitar sampled off a record is going to hit differently than a guitar sampled in the studio [...] So those things change your mood, the feeling you can get off of a record. If you notice that by the early 1990s, the sound has gotten a lot softer.

(McLeod, 2004)

In reminiscing about his own creative reaction to the shifting sample-licensing landscape of the 1990s, the Public Enemy producer highlights two important considerations, which will remain key foci for this chapter. Firstly, he makes a clear delineation between the sonics that can be

acquired from 'recordings', as opposed to those that can be acquired from 'records'. Secondly, he associates the effect of the acquired (sampled) sonics with both *feeling* and the ensuing aesthetic (*the sound*) of hip hop outputs produced in an era inevitably defined by these changing practices. The first point highlights samplists' preoccupation with phonographic sound as an essential source variable that facilitates the sample-based aesthetic. It is not a stretch to suggest that the second point, with its inferred triangle of *sonics-feeling-output*, refers to the impact the qualities of the source material will have on the practitioner's ensuing sample-based creative *process*. Shocklee's delineation, therefore, underlines that even the descriptor 'sample-based' in the context of hip hop music requires careful consideration and, arguably, only tells half the story: that of process, not of the qualities of the source. Furthermore, if all digital sonic capture can be described as a form of sampling (Kvifte, 2007), then it is essential to enquire what differentiates outputs that can be described as belonging to the sample-based aesthetic, from any other digitally recorded form of contemporary music.

The questions acquire increased urgency with the global uptake of maverick sample-creating strategies combatting a worldwide crisis of access to 'raw sonic materials' in contemporary *beat-making2*. This is best captured by Wayne Marshall in his aptly titled article, 'Giving up Hip-Hop's Firstborn: A Quest for the Real after the Death of Sampling':

Producers working for large record labels, enjoy production budgets that permit them to license any sample they like [...] Independent and largely local artists, operate well enough under the radar to evade scrutiny or harassment and continue to sample with impunity [...] Acts with a sizeable national, if not international, following but who lack the resources of a "major label" [...] find themselves in a tight spot: to sample or not, to be real or not, to be sued or not?

(Marshall, 2006, p. 869)

The problem therefore becomes political, and the creative reaction to it—through a radical reimagining of what a *sample* can be—an ingenious survival mechanism by the beat-making community to continue practicing authentic forms of sample-based music-making.

Less, then, a collective "death of sampling" and more so "a quest for the real" (ibid.), the issues sample-creating-based practitioners now face become the comparisons their works will inevitably attract against an aesthetic bar set by almost four decades of phonographically-sourced sample-based Hip Hop (if we consider Marley Marl's experiments with affordable samplers around 1984 as the starting point—see, for example, Kajikawa, 2015, pp. 164-165). In other words, the question becomes whether self-created source objects can suffice as effective triggers to sample-based production practices; and what qualities should be infused into these source objects, should they prove inspirational to—rather than simply functional for—the beat-making process. Arguably, there was less need to discuss the phonographic qualities of a source when the source was by default phonographic. But the context framed by these alternative practices necessitates an investigation into both the source's qualities, and the mechanics of the interaction between these and ensuing sample-based processes.

Using a predominantly autoethnographic approach, I will draw insights from two creative practice stages involving, first, the construction of original samples that strive to convey phonographic signatures, and, subsequently, sample-based composition that has been inspired, facilitated by, and built from these samples. The autoethnographic interpretations will be triangulated with literary and aural analysis (of relevant discography in the case of the latter) aiming at a reflexive extrapolation of the solo discoveries within a wider beat-making context. One of the critical insights that will emerge from the autoethnographic approach, as will be shown

next, is the notion of phonographic 'otherness'. Grappling with this concept, defining it, and examining its mechanics in the context of sample-based Hip Hop will provide the underlying thread to the chapter.

2. SOUND LITERATURE

Although a lot has been written about sample-based music practices, the majority of literature on Hip Hop focuses on the motivic aspects of what has been described as "musical borrowing" (Williams, 2013). This focus on the musical qualities of the source, and the ensuing discussion of sampling processes predominantly as means of compositional manipulation, however, miss out on essential *material* dimensions underlying the sonic phenomena that define sample-based musics. As Kyle Adams warns regarding the problems of hip hop analysis:

The techniques developed for the analysis of Western art music, even when they can provide accurate descriptions of some of hip-hop's surface phenomena, often leave the analyst without a deeper sense of how hip-hop operates and why it seems to communicate so effectively with such a broad audience.

(Adams, 2015, p. 118)

A number of authors, thus, have been digging deeper into sample-based poetics to arrive at more meaningful theorizations of their aesthetic effect. Many of these efforts pursue sonic (concrete) priorities over musical abstraction and explore embodied manifestations of sample-based sound—such as "gesture and impact" (Goldberg, 2004, p. 130)—to paint a more holistic picture of the perceptual phenomena on hand. Starting with Tricia Rose's *Black Noise*, her seminal analysis of Public Enemy and The Bomb Squad's late-1980s/early-1990s production processes reveals how African-American beat-makers' selection (*sampling*) and manipulation (*processing/mixing*) rationale bridges era/style-signifying phonographic qualities in source samples, with sonic utterances of political consequence in the final outputs (Rose, 1994, pp. 74-77). Yet, Rose leaves questions about the sources' qualities unanswered: "you really can't replicate those sounds" (Stephney, cited in ibid., p. 40).

In Making Beats, his ethnographic examination of Golden Era beat-making practices, Joseph Schloss (2014) offers an exhaustive mapping of hip hop producers' modus operandi, expressed as the manifestation of sonic traits collectively defining the sample-based aesthetic. Schloss discusses at length the choice of source materials (records), tools (samplers), and preferred approaches in sample-based hip hop composition3, refreshingly suggesting that "symbolic meaning (as opposed to pragmatic value within the musical system) is almost universally overstated by scholars as a motive for sampling" (ibid., pp. 135-168). Nevertheless, his technical discussion stops with the isolation of percussive sounds via filtering, and he soon returns his attention to rhythmic and melodic manipulation such as quantization and 'chopping'—the latter defined as the "practice of dividing a long sample into smaller pieces and then rearranging those pieces in a different order to create a new *melody*" (ibid., p. 151, emphasis added). Delving more scholastically into sample-based layering, Amanda Sewell (2013, pp. 26-67) constructs a detailed typology of sampling in Hip Hop, delineating samples into "structural" (main groove), "surface", and "lyric" categories, and these into further subcategories according to their source qualities and function4. Her typology allows for a more systematic discussion of how the juxtaposed layers in sample-based music interact, as well as their stylistic ramifications, but stops at a structural representation of sample-based layers rather than an exploration of the mechanics underlying their sonic juxtaposition and mixing.

In Sounding Race in Rap Songs, Loren Kajikawa (2015) fuses musical analysis with critical race theory to provide a fascinating re-reading of beat-making practices as sonic/musical representations of identity. But as the project's objective is not an examination of what defines sample-based aesthetics per se, it only goes as far as deploying surface/musical elements (motifs, rhythms) as the exemplifiers of these expressive mechanisms. Adam Krims (2000, pp. 41-54) perhaps comes closest to an effective description of sample-based phenomena with his notion of the "hip-hop sublime", which he defines as "a combination of incommensurable musical layers" that "are selectively and dramatically brought into conflict with each other". Although Krims understands "timbre [...] as a crucial means of organisation", he nevertheless associates his notion of the sublime with layering maximalism and, thus, the project manages to accurately express the phenomenon, but not the underlying mechanics responsible for the sample-based aesthetic as a whole (ibid.).

David Goldberg (2004, p. 129) pinpoints where the missing link may lie; citing Costello and Wallace (1990, p. 85) in his chapter 'The Scratch is Hip-Hop: Appropriating the Phonographic Medium', he offers a crucial insight: "Rap/hip-hop has been the first important American pop to use digital recording and mixing techniques in the music's composition, its soul" (emphasis in original). He goes on to attribute the defining characteristic of rap music to "spatial modification" expressed via "exploding kicks", "echoing snares, and the sometimes terrifying sonic manipulations of DJ scratches", mapping the creation (composition) and essence (soul) of the sample-based aesthetic to the interaction of sampling and mixing processes (Goldberg, 2004, p. 130). Combined with Mudede's interpretation of sample-based Hip Hop as meta-music, this interaction assumes exponential dimensions for the sample-creating-based practitioner. Not only have the mixing practices of sample-based record production not received sufficient attention, but an alternative approach that involves the construction of source content first, inevitably poses questions about the mixing and manipulation of source objects that themselves require prior recording, mixing, and production development. The pursuit of the newly-constructed 'phonographic' in a meta context, therefore, necessitates a bidimensional examination of mixing theory as it applies to sample-based Hip Hop from the perspective of both the 'source' and that of (its interaction with) the end output. The creative practice experiments that follow, alongside reflective insights drawn from the project's research journal, will attempt to illustrate some of these complex phenomena, the analysis drawing out what is essential about the sample-based aesthetic via the use of autoethnographic strategies.

3. ON 'PHONOGRAPHIC OTHERNESS'

3.1. HEARING OTHERNESS

The following section is extracted from a journal entry entitled 'Songwriting for Sound' and it illustrates the first of a progressive trajectory of insights that has led to coining the term 'phonographic otherness'. In it, I am reflecting on being immersed in the process of attempting to create *adequate* source material for subsequent sample-based composition:

It hit me that what I have been doing is, creating music in order to create sound. The recent 'songs' made this clear [...] I have always felt that the issue was never one of borrowing motifs/phrases that gives sample-based Hip Hop its unique signature; or, I should say it is not solely a musical argument [...] This would not explain why samplists go for *records*, rather than *recordings*. My pursuit throughout this journey has been to understand the sonic variables that explain this differentiation. My process, it seems, has focused on creating musical excuses, so to speak, in order to be able to make *mini records*—phonographic

moments, or ephemera. I have been creating riffs, jams, overdubs, even songs, as musical seeds that allow me to then create, capture, and manipulate the *sound* that carries these musical ideas [...] looking back at all the instruments laid down at the end of these long sessions, I see sonifying tools which needed musical ideas—musical context—in order to produce meaningful sounds that could then be captured and made phonographic [...] The full immersion into these moments has given the resulting objects [...] a musical, stylistic, and *sonic* coherency that makes them feel as *separate* entities even when they are/become part of a new beat (emphasis in original).

To illustrate this *alterity* between a sampled 'object' and the new beat that uses it, it may be worth analysing, first, an example from discography: Westside Gunn's 'Stefflon Don' from *Supreme Blientele* (2018)—produced by SadhuGold and Hesh—provides a case of highly accentuated difference between new and sampled (previously recorded) elements. Westside Gunn's voice carries markers of contemporary recording and production techniques (close-mic recording, enhanced 'presence' and 'air' in the equalisation, and compression stability) all of which differentiate it clearly from the vocal samples included in the looped phonographic sample. Whether the latter is sampled from vinyl or another format resulting in a lo-fi characteristic (or processed with the intention of sounding old and otherworldly), the combination of tremolo/delayed guitar and haunting vocals that it consists of feel decidedly 'other' to the rap, drums, and sub bass that comprise the new elements. Furthermore, the source sample sounds slowed/pitched down, which adds to the less pronounced top end of its spectral content. The two 'streams' so to speak (old and new), become clear at 0'43", when the sample momentarily cuts out.

From a mix perspective—beyond the clear spectral differences perceptible between the new (present, defined) and sampled elements (featuring less clarity, presence, and high frequency content)—there are also differences on the *depth* axis of the sonic image (as well as the 'speed' of the sounds in terms of their transient/envelope characteristics): the sample feels rather threedimensional and infused with notable spatial resonances (particularly on the modulated guitar, but also around the vocals). The whole sonic 'bubble' of the sample—to use a visualization from Gibson (2008)—is held together by its harmonic distortion, the coloration from the master medium, the recording/mixing signal paths deployed in its making, and any playback/recording devices used during sampling. Little effort seems spent on 'gluing' the samples with the new elements (this seems intentional, part of a lo-fi statement), apart from one heavy-handed but effective strategy: the notable compression applied to the whole beat (new and old elements combined) most likely courtesy of SadhuGold's Roland SP-404 sampler (Mlynar, 2018). This strategy makes the featured sample 'pump', expanding and contracting in terms of volume, reacting to the sub and drums, at times drowning the kick drum and, at others, allowing the hi-hat to jump out of the combined balance. The effect feels extreme but intentional, paying dues to lofi influences (such as RZA's production style and contemporary lo-fi Hip Hop), but also rhythmically and dynamically 'marrying' the two streams together in the end production. The sample is indeed treated as a 'featured' entity within the full beat: dynamically pumped, cut twice, kept separate, kept 'other' whilst, at the same time, integrated through the heavy compression approach. The ambience surrounding the sample expands and contracts in tandem, creating a haunting dynamic-spatial effect. The following journal entry provides a personal reflection upon the resulting sonic experience:

This belonging together of the elements that comprise the sample, this retainment of the sonic world of the sample whilst featuring it within a new beat, and the simultaneous

celebration (in terms of production choices) of its 'otherness' whilst integrating it into the new musical context (e.g. chopping, pumping with the beat) is a defining sonic characteristic of sample-based Hip Hop. Sample-based Hip Hop borrows, features, and manipulates not elements, but full masters, expanding and reshaping complete mix 'staging's that has already been committed to a master. As a form of not just music-making but also music *mixing*, sample-based Hip Hop is defined by the sound of the coming together of full mix 'stages' against manipulation possible through sample-based processes. We are actually hearing both new programming and new mixing interacting with previously committed mix stages. So, it is not just the sound of 're-imagined' sequences or phrases, but also the sound of creative ways of integrating phonographic sonic objects (whole 'mix architectures') into *meta* phonographic processes (emphasis in original).

Perhaps, SadhuGold's collaborator, rapper Estee Nack, summarizes the effect most succinctly when describing the beat-maker's style as "some old outer space shit" (Mlynar, 2018). In this laconic—if somewhat street—characterization he zones in on two important conditions for the perception of sonic otherness, as will be examined next: manifestations of time (*old*) and space (*outer space*) featured within the sonic discourse of the sample-based composition.

3.2. DEFINING SONIC OTHERNESS

I have been using the notion of phonographic 'otherness' to refer to sonic characteristics of source objects in the context of a form of music/making that has been described as meta-music (music about music) (Mudede, 2003). From an autoethnographic perspective, it is important to reflexively interpret my use of the term as a sample-creating-based practitioner, but also to define otherness more widely. Dictionaries range in their definitions of otherness, from "the quality or fact of being different" (Lexico, 2019, emphasis added) through to "being or feeling different in appearance or character from what is familiar, expected, or generally accepted" (Cambridge Dictionary, 2019, emphasis added). As may be extrapolated just from these two definitions, interpretations of otherness refer to some notion of alterity or difference, but there is no consensus on whether the inferred quality is regarded as absolute or relative. Furthermore, there are multiple understandings of the term in philosophy, psychology, sociology, and anthropology linking otherness to intersubjectivity and social identity, with implications that range from the construction of a self-image, through to attributing otherness "less to the difference of the Other than to the point of view and the discourse of the person who perceives the Other as such" (Staszak, 2008, p. 1). Applying characterizations of otherness to a group, thus, may also be driven by discrimination and so the term has assumed negative connotations in disciplines such as anthropogeography. Staszak (2008, p. 2) provides a helpful delineation, however, stating that "difference belongs to the realm of fact and otherness belongs to the realm of discourse".

For a musicological understanding of otherness, it is useful to turn to Weheliye (2005) who offers a fascinating link between the possibilities offered by the mechanical reproduction of sound (e.g. the phonograph) and notions of (inter)subjectivity as expressed by contemporary black artists. In *Phonographies: Grooves in Sonic Afro-Modernity*, he demonstrates how fictional characters in modern film/literary narratives:

[...] control and manage the contingencies of sonic otherness by locating it in the sounds of specific subjects [...] Music, and sound in general, roots subjects in their environment by making that environment audible, while the immersion that comes with the listening experience is always tied to a space from whence it originates, thereby spatially marking the sound.

Weheliye here not only demonstrates how the process of mechanically capturing and reproducing human sounds (e.g. music) transfers the energy of a subject onto a localized source, but also illustrates the spatial implications of this sonification. Although Weheliye is primarily concerned with how the sonic reproduction of music expresses the representation of identities negotiating social spaces, it will be interesting to expand on the implications of this idea beyond music consumption/reception/playback and onto music *making*.

In his exposition of the turntable as a repurposed or estranged object, Mudede (2003) helpfully explains that: "For Heidegger, a broken object exposes its thingness; for Marx, it exposes its source, the laborer, the one who has transferred his/her body's energy into the substance of the object". The estranged, broken, or repurposed object here is the turntable—Hip Hop's original instrument—transcending from playback tool to music-making instrument, and the source it exposes is the original laborer (the musician/s) whose energy has been materially and physically engraved onto the phonographic record being manipulated. Mudede illustrates the concept on his blog by depicting hip hop producer Eric Sermon operating a mixing board, on top of an image of a DJ scratching a record, itself sitting above a picture of Marvin Gaye playing the piano (ibid.). The illustration could easily be reimagined to feature a beat-maker operating a sampler (with mixing functionality), itself replacing multiple turntablists manipulating/scratching a number of records, which in turn contain recordings (*productions* to be accurate) of live performances (see Figure 1). This visualization helps conceptualize the meta levels of sonification involved in sample-based Hip Hop, as well as an illustration of otherness as the sonic alterity of a/multiple subject/s whose essence has been transferred onto material form (the phonographic groove).



Figure 1. A schematic representation of a digital sampler (with mixing functionality), enabling the manipulation of multiple record segments, which in turn contain productions of live performances.

It is important to note that Weheliye (2005, pp. 111-112) ties the listening experience to a "space from whence it originates [...] spatially marking the sound" and that he refers to "contingencies of sonic otherness" in relation to *control*. It would not be a stretch then to reimagine a samplebased producer's (e.g. SadhuGold's) manipulation of a sonic object (for example, a previously released record), not only as an abstract/motivic manipulation of musical material, but as a form of "discourse" (Staszak, 2008, p. 2) in the context of which the beat-maker exercises control over the material manifestations of recorded subjects' labor. The leap from social spaces to sonic objects is made possible via Weheliye's idea of sound rooting subjects in particular environments (via phonographic playback). The notion of environment, though, can be expanded beyond the spatial to all types of context 'marked' by the phonographic process (geographical location and/or hyperreal space, as well as the era, style, or time communicated by the record). The variables "marking the sound" (ibid.) become indicators of sonic otherness, a phonographic 'territory' that may resonate both time and space (alongside further musicological signifiers). Pickering (2012, pp. 25-26) coins the term "elsewhen" to highlight "the temporal distance brought about by recorded music" noting that: "Musical repeatability means that we are able to hear music from various previous periods and identify them, even on a decade-by-decade basis, by their characteristic musical sounds" (emphasis added). Simon Zagorski-Thomas (2014, p. 68) offers a useful definition of these characteristic sounds as 'sonic signatures' that "can relate to particular types of performance or programming characteristics [...] to spatial characteristics, to particular types of distortion, to the characteristics of particular types of sound sources or instruments or to the type of processing". It follows, that the sample-creating-based practitioner is tasked with the dual objective of not only manipulating (discoursing with, exercising control over) sonic objects that carry identifiable phonographic context, but also with creating and infusing these objects with sufficient sonic 'identity' (character), so that they feature as 'other' against the meta (samplebased) process. But how does this infusion manifest in practice?

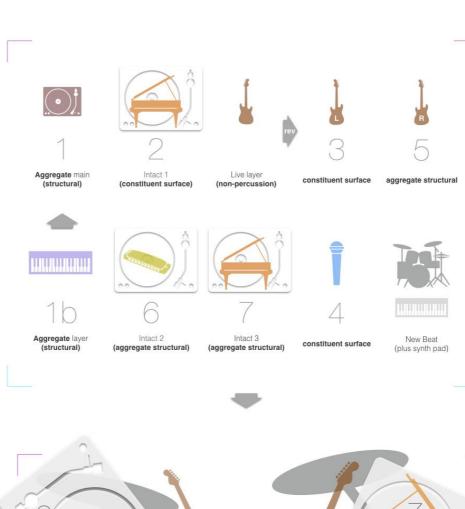
3.3. FEATURING OTHERNESS

For the practice-based part of this investigation an original hip hop production has been conceived built upon two groups of constructed samples. The two-stage process has involved creating and producing the samples as fully committed productions (records) of specific and different stylistic foci (at different times), and without a preconception of what form the ensuing hip hop production would take. The first of the samples has been sourced out of a multitrack production for a forthcoming release with rock band Asympt Man (of which I am a co-producing member, bassist and keyboardist, therefore ensuring access to the source material). The second sample is a segment taken from an original blues composition for which I have performed and overdubbed all the instrumental layers (drums, electric bass, electric guitar, piano and harmonica), recorded, mixed, mastered, and produced with particular attention paid to achieving late-1950s Chicago Blues timbral and spatial signatures. The two source scenarios have been purposefully included, in the first case, to allow access to individual multitrack elements and, in the second, to limit access to the full blues 'master' alone. The intention has been to create an applied context of sources being featured within a new phonographic construct, illustrating consciously featured phonographic contrast as a key aesthetic driver for the envisioned sample-based hip hop output. Additionally, the different degrees of access (individual multitrack elements vs. full master), allow both the construction of "aggregate" and the use of "intact" structures if one was to deploy Sewell's (2013, pp. 26-67) typological descriptors. As there has been little analysis in literature so far that focuses on the sonic (mixing) aspects of the phenomenon, the creative practice experiment has provided an opportunity to study the mechanics of sample layering beyond their structural functionality (i.e. also in terms of the mix architecture). Table 1 provides a summarized description of the sample layers, their types, as well as the creative processes (layering and manipulation) that have led to their mix placement in the final hip hop production. Figures 2a and 2b offer a schematic representation of how the individual layers are 'staged' in the final production. Video 1 6 showcases the individual sample segments as well as the complete instrumental production.

Sample/type	Description	Processing
1: Aggregate main (structural)	Aggregate structure functioning as the main groove (riff/hook) of the new production, constructed out of chopped and pitched-down Hammond B3 organ, acoustic drums and electric bass performances from the Asympt Man multitrack, plus added vinyl crackle. (The syncopated organ part in the verse is replaced by a legato variation for the chorus sections)	Organ sampled through Red Panda Tensor (tape effects emulator) pedal, processed through Akai MPC X amp distortion (emulation), and sent to backwards tape reverb on the sampler; drums sampled through Tensor pedal, processed through VCA-style compression and sent to a drum room reverb on the sampler; electric bass sampled through Tensor pedal
2: Intact 1 (constituent, surface)	Intact sample taken from the blues production/master and used as a constituent surface sample. (The severe filtering focuses the spectrum on the piano part contained within the intact sample)	Late-1950s Chicago Blues (e.g. Chess Records) inspired recording, mixing, and production process, deploying real recording spaces, a tiled bathroom as echo chamber in post-production, and hardware/software emulations of vintage pre-amps, channels, and outboard processors in both the tracking and mixing phases; end output low- and high-pass filtered, then sent through drum room reverb on the sampler
3. Non- percussion live layer 1 (constituent, surface)	A directly recorded, then pitched up and reversed lead Telecaster guitar performance layer taken from another production; used as a constituent surface sample	Processed through MPC X amp distortion (emulation), and sent to backwards tape reverb and a triplet (dub) delay on the sampler
4. Voice (constituent, surface)	Vocal sample from MPC X onboard library	Sent to backwards tape reverb and a longer non-linear reverb on the sampler

5. Non- percussion live layer 2 (aggregate, structural)	A directly recorded, and then pitched up and reversed rhythm Telecaster guitar performance layer taken from the same production as sample 3 above; used as an additional layer to the main aggregate structure for variation	Processed through MPC X amp distortion (emulation), and sent to the longer non-linear reverb and the triplet (dub) delay on the sampler
6. Intact 2 (aggregate, structural)	Another intact sample taken from the blues production/master, this time used as an additional layer to the aggregate structure	Production master achieved as described in 2 above; then processed through amp distortion (emulation), equalized, and sent to the drum room reverb and triplet (dub) delay on the sampler
7. Intact 3 (aggregate, structural)	As above, equalised and filtered to accentuate the piano part, and used as an additional layer to the aggregate structure	As above, then processed through amp distortion (emulation), equalized, high-pass filtered, and sent to the drum room reverb and triplet (dub) delay on the sampler

Table 1. A summarized description of the sample layers, their types, as well as the creative processes (layering and manipulation) that have led to their mix placement in the final hip hop production. Samples 1-4 feature in the main (verse) section of the end production, while the remainder samples (highlighted by shaded cells) are added layers brought in for structural variation and the differentiation of the chorus section.





Figures 2a and 2b. A schematic representation of the individual sample layers and their staging in the final sample-based production (the numbering of the sample representations corresponds to Table 1). Note that samples 2, 6, and 7 are represented by a turntable framing the instrument most accentuated by filtering, indicating *intact* structures (mini records within the record).

Table 1 provides a neat delineation between musical/abstract processes (surface phenomena) such as re-pitching, chopping, and layering noted in the 'description' column, and mixing/material processes (resulting in staging phenomena) such as the spatial and timbral manipulations detailed in the 'processing' column. It can be summarized that the processing choices associated with both the creation and manipulation of the samples have focused on two overarching strategies:

- 1. The *narrative/aesthetic*: infusing the samples with characteristic timbral and spatial qualities. For example, the blues 'master' has been created with considerable effort dedicated to reconstructing not just the spatial qualities of late-1950s Chicago blues recordings, but also timbral/tonal signatures reminiscent of the era and representative record label aesthetics. This has been achieved through the choice of instruments, recording equipment, microphones, and spaces deployed, as well as the emulation of vintage processors (and workflows) used in post-production. On the other hand, the main aggregate (structural) sample made out of band multitrack elements has been sampled through a tape effects emulation pedal and layered with vinyl crackle to construct a non-specific, yet clearly *vintage* record illusion. By way of a tape machine implied as both recording and mixing medium, and vinyl as the final/master format, the recording space shared by the drums and organ, and the matching tracking equipment signatures imprinted on both the drums and electric bass (via Universal Audio hardware compressors), have been accentuated and 'glued' back into a unified sonic experience inferring a shared phonographic time and space.
- 2. The *pragmatic*: ensuring the samples work as part of a coherent mix balance and fit in its overall staging. Much of the filtering, equalization, and spatial processing decisions have aimed at allowing the juxtaposed samples' full mix/master spectra, stereo images, and depth illusions to fit—in a coherent sense—over each other *and* in combination with the new beat elements (the electric guitar, drum hits, and synthesizer pads).

Returning to the notions of 'elsewhen' and 'elsewhere' as key characteristics of sonic otherness, it is clear to see that the first strategy is responsible for, initially, imbuing the source material with narrative signifiers that tie them to particular eras and styles (specific or unidentified), as well as spaces (whether geographical, actual, or hyperreal); followed by manipulating the sources to negotiate (amplify/intensify or control/limit) these sonifications in the context of the full sample-based production. The second strategy is concerned with integrating the ensuing sonic contrasts back into a phonographic whole, but the primary objective here is 'architectural'—the elements have to be mixed so that the actual frequency spectra, stereo width, and illusory depth of the 'collage' function in a sound-engineering sense.

Although the two strategies are not as clearly-cut or always consciously deployed during creative practice, this theoretical delineation helps illustrate the rationale behind the mechanics communicating aspects of sonic otherness in a phonographic context. The following table provides a typology of the perceivable sample characteristics that define this featured, phonographic otherness:

Sample characteristics defining featured 'otherness'	Examples
Limitations in the source's frequency range	vinyl resolution
Recording signal path colorations	microphones used, sound of mixing desk, recording media, outboard equipment
Mixing signal path colorations	sound of mixing desk, recording media used in playback mode, outboard equipment
End format/medium/master sound (coloration, distortion)	master tape, vinyl
Shared captured spaces over recorded elements	recording (live) rooms, echo chambers
Shared spaces applied in the mix/post-production	spatial processors, echo chambers
Playback devices/formats used to record	vinyl player, DJ mixer,
samples	YouTube/Spotify codecs
Sampling devices/formats used to record,	phono inputs on sampler, digital
manipulate and play back samples	extraction codec, virtual software
	sampler algorithm, filtering, pitch shifting
Surface noise resulting from various	vinyl crackle
mechanical/magnetic production phases	
Staging architecture achieved as a result of	stereo width, frequency 'height',
mixing decisions on three dimensions	(spatial) depth illusion
Mix-buss processing, and coloration when	shared equalization, dynamic
hardware/emulation is used	processing, stereo enhancement, sound of outboard
Mastering processing, and coloration when	shared equalization, dynamic
hardware/emulation is used	processing, stereo enhancement, sound of outboard
Purposeful accentuation of source's lo-fi-	quality/resolution reduction,
qualities	increase/addition of surface noise

Table 2. A typology of sonic characteristics communicating featured 'otherness' in source samples.

4. CONCLUSIONS

The characteristics above are extracted from the aural analysis and creative practice stages of this study in an attempt to systematize the processes and ensuing signatures that infuse sources with a particular sonic identity. The resulting character differentiates them from new beat-making elements and fuels the sample-based sonic discourse by enabling the interaction of meta-process, and sources perceived as 'other'. This is the aesthetic condition that Schloss (2014, p. 159) refers to when pointing out that "to appreciate the music, a listener must hear both the original interactions and how they have been organized into new relationships with each other". Although each of these characteristics communicates some aspect of sonic otherness, it is important not to think of them as defining variables that explicitly or individually ensure its perception. Instead,

collectively, they represent sonic manifestations of 'original interactions' that have taken place as part of a (mini) record-making process: it is the construction of the sources as part of a phonographic vision (a record-making context) that makes them stand out from mere 'recordings' (and, arguably, sample libraries, too), even if instrumental elements/layers end up being used in isolation by way of equalization, filtering, or access to multitracks. Albin Zak III (2018, p. 304) illustrates this quality best by providing the following disclaimer about record production after the post-war era: "Instead of simply *recording* performances, the idea was to *make records*, with the intent of imbuing the disc with a distinctive personality" (emphasis in original).

Of course, the otherness that is communicated by these sonic characteristics works in tandem with musical (harmonic, melodic, rhythmic, stylistic) coherency and structural manifestations (cuts, looping/repetition) that further tie the source utterances together. Furthermore, the difference can become accentuated by other bipolarities typically delineating contrast between sample sources and additional beat-making elements, such as: live feel versus programmed quantization (rhythmic); acoustic and/or electromechanical versus synthesized textures; analogue versus digital coloration (timbral); and spatial decays shared over source elements versus the gated ambient envelopes inherent in drum hits frequently deployed for beat construction (spatial). Finally, the majority of the variables listed in Table 2, as well as the signatures enforced by the sample-based production environment (sampler/DAW), may also describe the ways in which the final production of the sample-based artefact integrates the contrasts back into a cohesive end phonographic construct (when the respective techniques are reenlisted as part of the sample-based engineering process).

The sample-based hip hop aesthetic is the sound of manipulating and recontextualizing characteristics (sonic signatures) derived from phonographic ephemera. These characteristics include signal flow colorations and staging phenomena. But if otherness equates perspective rather than just difference, the *meta* process (sample-based composition/production) has to sonically manifest 'perspective-ness': the sound of discursive workflow, manipulation, a metaphonographic process interacting with manifestations of—past/other—phonographic processes. In other words, for recontextualization to function, it has to assume an initial context and, therefore, source samples need to carry markers of having first belonged to a sonic 'elsewhen' and 'elsewhere'. Echoing Schloss, the sample-based artefact has to sonify the process of (re)contextualization—as perspective, as meta-process—within the temporal confines of its structure. However, this sonification does not only manifest in the musical interactions between meta-organization and original interactions, but also in the mixing (sonic) mechanics that carefully negotiate the dynamics of contrast and integration through the materiality of textural and spatial manipulation. The autoethnographic lens deployed here has provided opportunities for "thick descriptions" (Ellis et al, 2011, p. 277) over intrinsic aspects of the creative practice that attempts to construct convincing phonographic 'others' in a sample-based context (making records within records). The examination potentially illustrates how simply making a record is conceptually different to making a record that will feel 'other' within another record, at the same time highlighting the opportunity—and need—to further study the rich sonic phenomena that lie under the surface of contemporary, technologically-interdependent musical forms.

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6. DISCOGRAPHY

Dr. Dre (1992), [CD] *The Chronic*, Interscope Records. Westside Gunn (2018), [digital release] *Supreme Blientele*, Griselda Records.

- ¹ Such as 'interpolation' (the mechanical recreation of existing phonographic motifs—for example, Dr. Dre's celebrated take on P-funk signatures with *The Chronic* [1992]); predominantly live (as in the style of The Roots); and/or heavily synthesized rap subgenres (such as Crunk and other southern US divergences).
- ² The term will be used interchangeably with 'sample-based hip hop production' from here on: in hip hop parlance 'beat' refers to a complete instrumental music production or backing, not just the organization of percussive/drum elements, highlighting the genre's rhythmic priorities. Williams (2014) extends Schloss's (2014) definition of beat as a sample-based instrumental collage to also include non-sample-based elements in the instrumental production.
- ³ For example, cyclic/Afrological priorities, attention to percussive detail, layering, juxtaposition, a communal "interpretive context", as well as chopping/flipping strategies (Schloss, 2014, pp. 135-168).
- 4 Sewell (2013, pp. 26-67) categorizes structural samples into "percussion-only", "non-percussion", "intact", and "aggregate" structures—the latter "derived from multiple component samples" or "different parts from the same song"; and surface samples into "momentary", emphatic", and "constituent" types—the latter described as "only a beat or a second long", appearing "only once every measure or two", and "layered against the groove".
- ⁵ A number of scholars (for example: Moylan, 1992; Lacasse, 2000; Zagorski-Thomas, 2009; 2010; Liu-Rosenbaum, 2012; Holland, 2013) have theorized on the placement of musical elements within the space of a popular music mix, and the concept of 'staging' has emerged as a useful theoretical notion: in essence, it suggests conceptualizing a music mix as a 'stage' where the placement—but also the dynamic movement and manipulation—of musical elements (mediation) has thematic and narrative implications (meaning) for both listeners and producers.
- 6 Available online from https://youtu.be/hu5ERs78gTw