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EXTREME METAL ACROSS THE DIGITAL DIVIDE:

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To my family and friends,

and in memory of Dr. Manfred Angerer.

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ABSTRACT

This dissertation examines how the analog-digital transition influenced the development of extreme metal, interpreting its present obsession with fine sub-generic distinctions and "old-school" revivals of analog aesthetics as a means of coping with an uneasy dependence on digital media. While extreme metal's values developed in analog networks, its transcendence of aural and bodily limits required digital prostheses. The digital divide in accessing these contested technologies structured extreme metal's system of subgenres, which—like the remembered inconveniences of the past—memorialize now-lost resistances.

This dissertation's arc is conceptual and chronological. Its introduction and conclusion frame its inquiry with present concerns, while the inner chapters are case studies that progress from undifferentiated analog beginnings in the 1980s to sub-generic crystallization up to the arrival of the digital audio workstation in the mid-1990s. Using archival materials, newly conducted interviews, and close readings of musical records, these case studies put vernacular theories into dialog with discourses drawn from the musicology of record production, music theory, and critical theory. Ultimately, these constellations aim to articulate a constitutive relationship between what it means to analyze, make, and enjoy popular music.

This dissertation's contributions are twofold. First, it provides models for the analysis of popular music grounded in the historically conditioned values of an aesthetic community—and how these values are adapted to disruptions. Second, this dissertation argues that (sub-)genre, as the promise of being able to repeat (increasingly narrow) aesthetic experiences, requires technologies that make this repetition possible—at least in fantasy.

The Introduction uses ethnographic vignettes to establish the contemporary importance of sub-genre and nostalgia. Chapter 1 asks why pioneering musicians can claim to have heard extreme

metal before it existed, by manipulating the time-axis of existing records on tape or vinyl players. This fetish-like objectification of creativity reflects a disavowal of subjective creativity. Chapter 2 analyzes death metal drumming's labor theory of value, demonstrating why digital drum sample replacement was both essential and intolerable for the development of the prized blast beat, which was valued as concrete time, but measured as abstract time. An Interlude examines how moral panics around backmasking let horror-inspired album introductions transmit different messages to insiders and outsiders. Chapter 3 reconstructs the digital-analog assemblage Morrisound Studios used to create the signature hyper-real performance associated with death metal and explores how its aural trace made the digital divide audible. Chapter 4 argues that the death metal production aesthetic undermined the groove-based forms of grindcore, examining how former grindcore bands re-record their own songs in a death metal idiom. Chapter 5 contests the notion that black metal was only a return to an imagined analog past, analyzing it as a post-digital style that used the devaluation of human performance it critiqued in death metal to incorporate influences from electronic dance music. The Postlude returns to the present and considers what is at stake when resistances are lost to remediation.

INTRODUCTION. PAST MEDIA(TIONS) IN SUBGENRES

The sun sets over Chicago's Ukrainian Village neighborhood on November 19th, 2019. After waiting in line with metalheads and a chainsaw-wielding surgeon for three-quarters of an hour, I step into the Empty Bottle. A little later and I would have been turned away. I knew the show—headlined by Exhumed and Gatecreeper, death metal veterans and up-and-coming old-school revivalists, respectively—would draw a big crowd. Once inside, my eyes scan the merchandise antechamber. Lit by claw cranes, arcade cabinets, and pinball machines, glistening between dark apparel, I see vinyl sleeves and cassette tape cases. These analog revenants recall extreme metal's founding years, even if the sounds and artwork they store are digitally authored. Aptly, digital-to-analog transfer reverses the genesis of extreme metal's subgenres, a universe of subtle differences that developed in and against the digital turn in sound recording.

I pick up a cassette of Gatecreeper's *Deserted.* As I examine it, the seller leans in and says, "You should go for this; there's only three left." Sold only on this tour, this limited release recalls extreme metal's origins in the tape-and-letter trading underground. It also manufactures scarcity at a time when extreme metal is abundantly and conveniently accessible on streaming sites like Bandcamp. The tape's inlay evokes what a demo from those years would have looked like. A black-and-white collage, cut and pasted from drawings, found images, and typescript, sutured by a Xerox machine. You're meant to see the seams. Sandwiched between the band logo and title, a one-eyed zombie glares through a Viking-esque frame: a snapshot of what Swedish death metal demos would have looked like ca. 1988-89. The vinyl sleeve, for its part, hearkens back to 1990-91: a surrealist landscape, a writhing reef of bones and tentacles, drenched in all shades of bile. Being literate in extreme metal is a form of media archeology. The scene expects its members to be able to interpret these combinations of medium and decoration

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as pointing to specific subgenres, histories, and sounds. Objects like this Gatecreeper cassette straddle the line between generic repetition and counterfeiting. But they also educate a new generation of archaeologists.

Gatecreeper, founded in 2013, are part of an ongoing "old school" death metal revival. Their model is Swedish death metal, with bouncy punk beats and a frankness about addiction struggles that make the band palatable to hardcore's politically inclined crowd but suspect to metal purists. Most importantly, Gatecreeper nail the timbres coined at Sunlight Studios in Oslo. The Swedish sonic signature is synonymous with the gear that made it repeatable: the mid-range buzz of the Boss HM-2 digital distortion pedal, the wooden-sounding samples of the plastic ddrum kit.[1] But Gatecreeper's album was tracked, mixed, and mastered throughout the US (Tucson, AZ; Salem, MA; Portland, OR). And almost certainly, neither a physical HM-2 pedal nor ddrums were used. Their sounds are easy to emulate with digital audio workstation plugins or with dedicated live processors like Axe-Fx. Their sound is a digital facsimile of a past analog-digital recording aesthetic tied to particular tools and places. I wonder if retaining the physical form of the cassette is a form of penance: a tribute to a shared experience of scarcity neither I nor Gatecreeper were part of. I pay for the tape and stow it away. I don't own a tape deck.

The vinyl sleeve of Exhumed's 2019 full-length, *Horror*, catches my eye next. The veteran band has been around since 1990. Back then, their albums featured photographs of rubber limbs slathered in stage blood, quite usual for a band inspired by Carcass's raw grindcore odes to rearranged anatomy. That look has a sound. I see the visual cues and my inner ear hears groovy riffs, a mix of gurgles and throaty screams, and a high-pitched snare. But two decades on, Exhumed's portrayal of gory horror

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[1] While it may look like one, "ddrum" is not a typo, but a Swedish company that pioneered sample-based drum kits. Chapter 3 dives into the diversity of 1980s extreme metal drum sounds.

has taken on a reflexive twist. Initially, the death grind band's subject was unmediated gore. Now, that gore is presented through the filter of 1980s splatter movies on obsolete media. Dr. Filthy—the surgeon mascot I saw outside—cuts through its cover, styled to resemble a rental VHS. The teal frame reads "Relapse Home Video," printed-on stickers ask users to "be kind & rewind." The cover of the album next to it, 2017's *Death Revenge*, mimics a vintage poster for a never-made Italo zombie movie. Underneath printed fold marks, a grainy painting superimposes zombies and sinister surgeons onto a graveyard scene.

The canned music stops. I hurry to the stage to see the first band. Sweating in a lat-baring tank top, Judiciary's vocalist apologizes for not playing death metal between songs. The politics of punk-metal hybridity are treacherous. If Judiciary are lucky, they'll be read as metal-inflected hardcore. Metalcore—a different blend of the same ingredients—would be less palatable to the death metal crowd. The next supporting act, the power trio Necrot, is another recently-founded old-school death metal band—down to the hand-drawn logo with a little pentagram in the coffin-shaped "o" in Necrot. By the time Gatecreeper enters the stage, I am stunned by how *similar* these bands sound in a live setting. I familiarized myself with their most recent albums before the show. On record, the nuances of guitar timbre and drum production suggest nods to iconic bands and studios before the first riff was over. Live, the overloud guitars and drum crash against the venue's low ceiling. Amid the congestion, it's easier to feel heavy riffs in your body or see a drum kick as a gust of air that makes the printed-out set list on the speaker dance. With a penchant for controlling blazing speeds and rapid reversals, death metal works best in ultra-controlled, impossible spaces you can construct in the studio. Or on a laptop.

Exhumed's set heightens my daze into a retro-tech fever dream, with stage props featuring 90s TV tubes in 70s cabinets playing digitized trailer reels of 1980s horror movies. This melting of media

horizons recalls a time when horror movies were stowed away behind opaque curtains in video rental stores, meant to keep the morbid curiosity of underage audiences at bay. But, as with extreme metal in the 1980s, that distance and scarcity only heightened the allure. I'm close to the stage now, close enough to see the guitarist's soloing shred droplets of blood onto the pickguard of his Stratocaster. Dr. Filthy comes out and locks chainsaws with the fan double I saw outside earlier. The band throws VHS tapes into the audience. I keep a copy of *Hard to Kill* as a souvenir. I don't mind that it's cracked open—it's not like I own a VHS player.

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The Covid-19 pandemic ended live shows and my exploratory fieldwork a few months later. I contemplated the broken VHS spilling its magnetized next to the pristine Gatecreeper cassette on my desk. Social distancing reminded me of how I first encountered and enjoyed extreme metal—as a teenager, from afar, through the Internet. Already then, in the mid-2000s, those digital meeting places held onto materiality with desperate strength. I remembered debates on the legitimacy of digital sample use in death metal drumming, fan reviewers trying to divine studio processes from sounding traces, and the in-depth documentation of what gear was used by whom and when. Moans that the creativity born in the analog underground of the 1980s had been lost somewhere in the 1990s, just as extreme metal's major subgenres, death metal, black metal, and grindcore, solidified.

Since then, the efforts to document, retell, and revive that moment have only grown. Extreme metal is going to extreme lengths to preserve the memory of its analog mediation—and digital remediation.

Why can't it let go?

Why the extreme technostalgia?

This dissertation proposes that extreme metal's conflicted attachment to digital technology—needing it but wanting not to need it—makes it a model case that helps us understand how genre, as a form of repetition, can be marked by the memory of past media.

Distinctions between subgenres in extreme metal hinge on its troubled exodus from analog to digital mediation. Because extreme metal was founded on values that chafed against the conspicuous and unequal introduction of digital tools, the conflicts around the digital divide still resonate. Metal music radicalized in the tape trading underground of the early 1980s. In this analog infrastructure and imaginary, sounds and subgeneric labels were in flux. But while extreme metal's initial values developed in these independent analog networks, its musicians soon pushed past the limits of bodies, acoustics, and recording equipment, inaugurating an uneasy reliance on digital prostheses in the process. No prosthesis was more consequential than sample-based drum replacement. By perfecting the problematic prestige technique of the blast beat (at the price of its prestige) on records, drum replacement gave death metal a repeatable sonic signature. But drum replacement also sparked awe and envy, since unlike other genres, extreme metal could not incorporate sampling and simulacra performances. The ensuing adaptations and rejections stabilized the other poles of extreme metal's subgeneric system in the early 1990s. Thus, extreme metal's attachment to its past media maintains the logic of this compromise formation, as a kernel of the difficulties that once made a difference.

The case studies of this dissertation follow a conceptual and historical trajectory. They begin in the undifferentiated analog underground of the early 1980s and end with the subgenre-defining digital fissures of the 1990s. Each is a dialectical constellation of the values extreme metal imposes on media, and how these media support and sabotage the perpetuation of those values. This, in turn,

grounds my analysis of the audible glitches introduced by digitalization, tech-political fissures that created space for new modes of expression. While the close analysis of recorded songs is central to my research, I burrow out from the analysis of these works into the technologies used to create them—and how these technologies are imagined and re-imagined in vernacular discourse. The archive of this dissertation is a product of extreme metal's compulsions. Because the digital turn was so contentious, it is—and continues to be—documented in oral histories, reproductions of fanzines, and interviews. Hearing extreme metal's recorded legacy through the history of these conflicts opens its up to a dialog with psychoanalysis, critical theories of technology, and recent work on the materialist dimensions of genre.

The primary intervention of my research is the notion that that genre, as the promise of repeatable aesthetic experience, needs technologies that make repetition itself seem possible—and that the disappearance of these media comes at a cost.[2] My interdisciplinary approach to history and analysis also responds to three concurrent trends in the study of extreme metal and the broader study of recorded popular music. First, the emerging field of metal music studies often naturalizes extreme metal's fantasy of autonomy. Studying extreme metal's differentiation into subgenres as a response to changes in mediation it couldn't ward off helps explain its disavowals and political irresponsibility. Second, studies of recording technology and its history rarely address the impact these technologies had on the values of specific genre communities—and tend to foreground the producers' perspective. Triangulating between real technologies and their refraction through the values of aesthetic communities, I strive to capture more holistic constellations of technologies and intentions. Third,

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[2] The oldest of these being oral transmission. As it disappears, it becomes recognizable as a technological medium because remediation to written or recorded transmission inevitably transforms originally oral genres. Thanks to Jacob Reed for pointing this out.

music theory has taken a keen interest in the analysis of metal music but tends to neglect what is valued most in vernacular analysis, such as timbres that point to particular devices, processes, and places. Throughout this dissertation, I use vernacular theories of music and media as a corrective for what music theory aims at but usually misses.

Re-hearing the digital turn through the microcosm of extreme metal's subgenres allows us to study how communities adapt their memory, principles, and practice to technological-economic disruptions. As digital technology increases control over sounds (and experience in general, if those warning about the "attention economy" are to be believed), what is repeatable becomes narrower and more predictable. This control threatens the limits that allowed extreme metal to experience itself as extreme. Thus, some of the analog resistance that extreme metal once had to overcome has to be kept alive, as a transfigured, enjoyable inconvenience.

While this memory of materiality stabilizes present subgeneric distinctions, it cannot resuscitate the dynamic re-exploration of what it meant to be extreme *and* metal. In the diminishing returns of extreme metal's attempt to hold onto its original mediation, we may hear the echo of an equally ominous and ubiquitous process in capitalist modernity: nothing less the vanishing of ecologies—biological, social, and technological—that support particular forms of life, and attempts to grieve and conserve them. Even if they were inconvenient.

Theorizing extreme metal's remediation

Wait, why would extreme metal need to rescue inconvenience of all things? If you have some existing impression of extreme metal, its general ferocity, "power," "heaviness," or "transgression" might seem like more convincing master signifiers for it, something extreme metal would much rather rescue. (And if you draw a blank, there's a primer coming up.) In psychoanalytic terms, these signifiers organize

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extreme metal's *ego ideal*, how its musicians and fans like to see themselves, through its music: as independent and above the mundane, overcoming any and all limits. The outward intensity of the sounds, and the frontal assault on senses and polite sensibilities have—unsurprisingly—dominated scholarly interest in extreme metal, much as they dominated attempts to censor metal music in the past. Consequently, a great deal of scholarship on metal—extreme and otherwise—pits metal against its Others, the mode of opposition it favors. Thus far, the emerging field of metal music studies addresses its object in the register of this flattering fantasy. By contrast, I am interested in extreme metal's dependencies, its inconvenient attachments—the technologies it needed, the *superego* demands that made these needs so fraught, and why it can't let go of that complex.

By reconstructing extreme metal's vernacular theory *and* its material mediation as the limit of that theory, I ground the analysis of recorded sound in the values of an aesthetic community—but without naturalizing those values. With its conflicting needs and desires, extreme metal's theory of what it should be—and its attempts to rescue that "ought" against the shifting "is" of technological change—can't help but theorize alongside, and against, critical theories of media, materialism, and psychoanalysis. Throughout this dissertation, I make these lateral connections explicit and useful to scholars not already interested in metal music. After giving an overview of this methodology, I locate my dissertation's contribution to the study of musical genre.

What made metal extreme

Extreme metal is a retrospective umbrella term applied to a number of subgenres that escalate earlier heavy metal music to a point where it becomes, well—extreme. Just where the extreme begins is a point of contention, of course, which is why extremity's diminishing returns drove extreme metal's

fragmentation into subgenres.[3] In this dissertation, I focus on three subgenres that are considered extreme by almost anyone: death metal, grindcore, and black metal. While doom metal and thrash metal are also often considered extreme metal, they are borderline cases, so I will focus on the former three.

On the one hand, extreme metal represents a continuation. Instrumental mastery is prized, bands normatively include drums, one or two distorted guitars, bass, and vocals, with compositions anchored in repeated guitar riffs as opposed to vocal melodies. Extreme metal inherited these values from its plain "heavy" forbears. Heavy metal, for its part, emerged in the late 1960s as a blend of rock's overdriven edge and the blues' sense of impending doom, but replacing the American topics of bootstrapping and post-slavery plight with a continental Gothic imaginary. Rather than offering secular solutions to the political and social upheavals of their age, Black Sabbath, the ur-metal band, translated worldly antagonisms into occult omens. A decade later, punk's influence on the New Wave of British Heavy Metal introduced faster speeds and made a more stripped-down approach viable. Venom, the roughest and punkiest band of that wave, inspired teenagers across the world to record and share the first stirrings of what would eventually be classified as extreme metal. In doing so, extreme metal's budding tape-trading underground took advantage of blank music cassettes and Xerox machines, as well as the postal system. This bottom-up infrastructure and imaginary, which I cover in Chapter 1, enabled modes of expression that escaped the economic pressures and moral censure of contemporary polite society. It gave a material base to metal's existing ideology of independence from the mundane.

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[3] Recognizing extremity as a moving goalpost for metal, scholars of metal are beginning to extend the concept of extremity beyond metal. Varas-Díaz, Scott, and Bardine, *On Extremity: From Music to Images, Words, and Experiences*. In the conclusion, I consider how the idea of "metal beyond metal" reproduces the deflation of extremity amid the digital turn.

On the other hand, extreme metal also represents a rupture, a qualitative escalation. Just as the tape-trading underground began to stir, above ground, glam metal kept earlier metal's heavy riffs and flashy solos but swapped out doom and gloom for sex, drugs, and rock'n'roll hedonism. The success that the likes of Def Leppard met with this formula established glam metal as the first of many "near enemies" for extreme metal: something recognizably metal but allied with a mainstream imagined as driven by base economic interests. Pioneering music sociologist Deena Weinstein identified a roster of "fundamentalist" bands that reacted against glam metal, supposedly returning to heavy metal's roots, but also one-upping their forebears with even more austere topics and sounds.[4] A "Protestant reformation," in Weinstein's words, an attempted return to a past, that, like all fundamentalisms, ended up missing the mark. The analogy with Protestantism also captures extreme metal's wariness of bringing worldly concerns into the church. To maintain the enshrined values of independence, almost anything else may be sacrificed.

But there are limits to what the pursuit of independence from the mainstream can explain. Among scholars, extreme metal's self-marginalization has been seen as accounting for both its initial sonic escalation *and* subsequent stability—a view that fails to capture how extreme metal, in pursuing its own aims, tore itself apart. Sonically, extreme metal became more insular and self-referential. While Robert Walser shows that heavy and glam metal prominently cite the blues and classical virtuosity, Keith Kahn-Harris diagnoses extreme metal as "a radical and systematic process of removing metal from this kind of cultural dialogue."[5] But for any hermit, the outside is constitutive. Hence, Erik Smialek has made the case that extreme metal can avoid precise definition because it is defined by its

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[4] Weinstein, *Heavy Metal: The Music and Its Culture*, 49–51.
[5] Walser, *Running with the Devil. Power, Gender and Madness in Heavy Metal Music*, 57–58. Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 30.

Others.[6] More recent near enemies, nu-metal and metalcore, attract particular ire. Being reclassified as either on the *Encyclopedia Metallum*, one of metal's foremost gatekeeping institutions, can be grounds for removal.[7] But the ascent of nu metal and metalcore postdates the years between 1985 and 1995, when death metal, grindcore, and black metal acquired their present meanings and sonic signatures. Extreme metal's party truce against "false" metal postdates the contentious period during which extreme metal's subgenres formed.

This dissertation argues that extreme metal's subgenres formed around internal conflicts that centered on how to preserve inherited values across the digital divide. However, subgenre is often theorized primarily as a function of social distinction—not just in extreme metal. Like electronic dance music that developing at the same time, extreme metal is notorious for its differentiation into countless subgenres—and for the value that adherents place on knowing these distinctions and their history.[8] Recognizing these parallels, Kahn-Harris adapts Sarah Thornton's concept of "subcultural capital" to theorize both extreme metal's fragmentation into subgenres and distinction within the scene.[9] Musicians and (fan-)critics frequently communicate the sound of a band or album by comparing it to genres, subgenres, and other bands or albums. Those who wish to claim "mundane" subcultural capital by participating in this discourse must acquire extensive knowledge of sounds, categories, and histories,

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[6] Smialek, "Genre and Expression in Extreme Metal Music, ca. 1990-2015," 65.

[7] Currently, there is a comment that suggests reclassifying Judiciary, who are alleged to have crossed over from hardcore-influenced thrash metal into metalcore. "Reports - Judiciary - Encyclopaedia Metallum: The Metal Archives."

[8] Extensive taxonomic systems and family trees are common in both electronic dance music and metal music. A notable example is Ishkur's Guide to Electronic Music, an encyclopedic taxonomy-cum-history of electronic dance music created by Kenneth John Taylor and continuously updated since 2000.

Such exhaustive family trees and genealogies also exist in metal, for an in-depth discussion of them that ultimately takes a position somewhere between Fabbri and Bourdieu, see Chapter 1 of Smialek, "Genre and Expression in Extreme Metal Music, ca. 1990-2015."

[9] Theorizing the British club subculture at the height of moral panics around raves at the end of the 1980s, Thornton observed how concerned her interlocutors were with all manners of distinction that surrounded the consumption of electronic dance music. Her definition of "subcultural capital" closely parallels Bourdieu's, and those who claim it rise in the esteem of their peers. Thornton, *Club Cultures: Music, Media, and Subcultural Capital*, 27.

thus furthering extreme metal's self-documentation. While mundane subcultural capital maintains shared taxonomies and infrastructures, "transgressive" subcultural capital is claimed by challenging consensus.[10] Kahn-Harris sees these two forms of subcultural capital driving periods of stasis, where values remain unchallenged, and periods of crisis, where values are re-valued: death metal's apex of popularity represented a glut of mundanity, which was challenged and undone by black metal. But such a Bourdieuan account overstates extreme metal's autonomy and flatters it by underplaying its dependence on the capital it could neither own nor claim as its own.

The digital turn divided extreme metal in its becoming. New sonic extremes could be achieved with tools the analog underground couldn't offer or afford on its own. That uneasy reliance prompted intense competition and bitter recriminations about the use and access to technology among extreme metal bands. For a short moment, the strikingly novel death metal drum sound was, effectively, the property of a single studio. These historical constraints, and their lasting repercussions, are neglected in purely taxonomic accounts of metal subgenres, like Benjamin Hillier's, which frame production as just another choice.[11] Changes in recording technology and practice didn't just allow musicians to re-explore metal music's generality in new ways; the conflicts around their use were just as important in clarifying fronts and suturing labels to sound. This is because extreme metal inherited rockist prejudices against technological aids, making it unable to naturalize and accept the use of sampling, programmed instruments, and the contribution of studios and producers in the ways electronic dance music and other Afrodiasporic genres could. For their logical cohesion, extreme metal's subgenres didn't just depend on technology immediately—but also on the attitudes other subgenres took towards

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[10] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 127.
[11] To be sure, in the digital present, it is a choice—more than ever before. Hillier, "Considering Genre in Metal Music," 19.

it. These conflicts scaffold extreme metal's symbolic differentiation.

In a preliminary fashion, we can map out how recording technology, suspended in a complex web of rejections and embraces, structures extreme metal's subgeneric space. Grindcore oscillates between frantic bursts of noise and danceable grooves, with a raunchy looseness inherited from punk. Whether political or pornographic in theme, grindcore's recorded sound depends on some messiness. As Chapter 4 shows, this became evident by its incompatibility with death metal's production aesthetic, which tends towards surgical precision in its studio aesthetic—a dry in-your-face-ness called for by its virtuoso stop-and-go contrasts and machine-gun drumming (the so-called "blast beat," the subject of Chapter 2). But this "hyperreal" sound was just that, impossible to achieve without digital interventions. Morrisound Studios pioneered drum sample replacement that could realize death metal's intentions on record, which were hitherto limited by the endurance of drummers and the laws of acoustics.

While black metal's determinate negation of death metal has been recognized before, it is still erroneously reduced to championing "poor" or "DIY" production against the conspicuous digital perfection of death metal.[12] Chapter 5 instead analyses the subgenre as thoroughly post-digital. On the one hand, black metal recaptured the sonic diversity—even contingency—of unruly analog recording that existed before death metal's digitally-aided codification. On the other hand, behind the grainy veil of its tinny guitars and hoarse wails, you may hear a new openness towards repetition, synthesizers, and the electronic. By denouncing death metal's virtuosity and its digital dependency,

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[12] This is the case made by Ian Reyes, who captures the rhetorical tactic of positing a "return" but misses the substantially new content Norwegian black metal smuggled in. Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics." I provide a genealogy of Norwegian black metal's new riff techniques in Walch, "'Was Niemals War' – Das Selbstbewusstsein Des Norwegischen Als Konstruktion Einer Vergangenheit Und Konstitution Einer Klanglichkeit.".

black metal gave itself permission to outsource performance to machines. As the subgenre continues to struggle with its far-right faction, its embrace of the digital in the guise of analog traditionalism resembles what Horkheimer and Adorno considered fascism's perverse solution to the contradictions of capitalism: a consecration of modern means of production (and destruction), in the name of pre-capitalist warrior values.[13]

Thus, extreme metal's subgenres are more than the discursive result of a desire to display subcultural *savoir-faire.* They represent alternative solutions to the tensions between technology and ideology in the pursuit of new sonic extremes. But the vignettes I have given are not to be confused for essences. Rather, they are as constellations in miniature—of sound, meaning, and technology—whose gravitational contingency undermines essentialism precisely by introducing technology as a mediating but changeable "third term" that shifts under what different actors want and need it to be. Sufficiently elaborated, these constellations capture how extreme metal's undifferentiated primordial sludge spread out into distinct subgenres. The productive conflicts inevitably concerned a loss of limits, the sense that things had gotten a bit too convenient and easy to achieve. For, if there is no impediment to your will, how could you ever experience an extreme? With my overarching methodology and choice of sources, I aim to grasp this libidinal investment of extreme metal's material mediators.

Constellations and the vernacular

I put the vernacular ideas I submit to into perspective with a method pioneered by Walter Benjamin: thinking in constellations. I reference Benjamin here get him out of the way, because the shape of his attention—a distractibility that draws debris together like an industrial magnet—holds this dissertation together, like a silent cantus firmus you may hum along to. Benjamin introduces this

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[13] Horkheimer and Adorno, *Dialectic of Enlightenment*, 189–90.

method, which runs through his oeuvre, with a metaphor that foregrounds how constellations create novel objects from things:

> Ideas are to things as constellations to stars. This is to say, first of all: they are neither their concepts nor their laws. […] ideas come to life only where extremes gather around them. […] They remain dark so long as the phenomena do not declare their allegiance and flock around them.[14]

By "extremes," Benjamin understands parts that are disassembled from otherwise mute objects, only to be refitted into the constellation. The effort invested in this dislodging adds dynamism to both the idea and split-open things. (Think of how sometimes, you have to squint to see Capricornus in the night sky.)

But Benjamin doesn't own constellations, since this tightrope act of a method bubbles up spontaneously whenever faith in history's totality flags. Studies of modernism that treat it as a repeated working-through of one problem in changing conditions are a model for this dissertation: think of T.J. Clark's "core samples, or preliminary totalizations" in *Farewell to an Idea*, or that one big cluster around a year and its signifiers, Seth Brodsky's *From 1989*.[15] Pursuing utopian excesses, stubbornly on its own terms, it's hard to not think of extreme metal as a mini-modernism, whose subgenres are its proliferating "-isms." These echoes of modernist preoccupations are most pronounced in Chapter 2, which examines how digital drum replacement impinged on death metal drumming's' labor theory of value—which valued the blast beat for the concrete physical labor it took to master, but measured and compared it using abstract time. This idea's homology with the core contradiction of capitalism, the obsolescence of human labor, thus draws larger historical forces into the microcosm of death metal's experience. What makes thinking in constellations a tightrope act is the distanced empathy they

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[14] Taken from Howard Eiland's excellent new translation. Benjamin, *Origin of the German Trauerspiel*, 10–11.
[15] Clark, *Farewell to an Idea: Episodes from a History of Modernism*, 6.

require—you can't just catalog material but have to resurrect the ideas that once moved these materials. Extreme metal's records and technologies can't speak for themselves; what makes them talk are subjectivity's attempts to make them fit into inherited norms.

Constellations, as this dissertation understands them, can't do without ideas of what a genre of music should be. These ideas are imposed by subjects on shifting materiality and precariously recovered from that materiality in turn. This contrasts with the "mediatic musicology" that Kyle Devine has called for, which doesn't begin with a concept of music, but rather ascends from material particulars to something like music (maybe).[16] Such approaches, inspired by Gilles Deleuze and Bruno Latour, have gained ground in and beyond music studies. While they go by many names (speculative realism, object-oriented ontology, etc.), they are all skeptical of abstract concepts in general and human subjectivity in particular. Broadly post-critical, mediatic musicology describes and reconstructs networks in which human and non-human actors are epistemologically undistinguished. As Nicholas Mathew notes, this mode of knowledge generation mirrors not just digital information access, but also neoliberal fantasies of a purely technocratic administration of people and things.[17] Instead, I use Lacanian concepts to theorize how the objects of constellations pass through subjectivity. While this subjectivity is not sovereign, it still makes objects more than they would be otherwise—by constellating them. Thus, while I engage so-called new materialist approaches in my constellations, I do not share the "flat" ontology of these approaches.

To reconstruct the values and beliefs that pull together these constellations, I draw on what is already (or, from the vantage point of the past, still) available from extreme metal's formative years: records, liner notes, coffee-table books, fanzines, interviews, and other printed and online debris. Key

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[16] Devine, *Decomposed: The Political Ecology of Music*, 21.
[17] Mathew, "Listening(s) Past: History and the Mediatic Musicology," 145, 151.

fanzines, like Jon "Metalion" Kristiansen's *Slayer Mag*, have begun to appear in hardcover with extensive commentary.[18] Dedicated blogs, like *Send Back My Stamps*, digitize and share other DYI publications from that era.[19] Numerous oral histories contextualize these snapshots. Typically curated by journalists or scholars with personal ties to the scene, who interview musicians and then weave statements into an overarching narrative.[20] These narratives are filtered according to subgenre and, occasionally, location—even though all subgenres share origins in a tightly-knit, glocal community of tape- and letter traders. Chapter 1 represents this status ante quo, the as-yet undifferentiated process of metal-becoming-extreme, while later chapters approach the archive from the perspective of different subgenres: death metal in Chapters 2 and 3, grindcore in Chapter 4, and black metal in the Conclusion. With social media supporting a revival of extreme metal, the older generation transmits knowledge to a new audience that did not experience extreme metal's rise from the analog underground.[21] Even as these narratives diverge according to subgenre, they inevitably lead back to this constitutive moment and its repercussions.

The retelling of this re-mediation keeps extreme metal's canon legible, as it constellates records with their conditions of recordability. Consider the meanings of the word "canon." A canon is a sanctioned set of laws and a collection of works, meant to stabilize future production. In its oldest

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[18] Kristiansen, *METALION: The Slayer Mag Diaries*.

[19] "Send Back My Stamps! – Metal History through Fanzines."

[20] Just like in the fanzines of the past, what vouches for authenticity is a code of honor. Readers expect that putting words into the mouth of a respected musician would draw pushback.

[21] The importance of that snail mail infrastructure and the digital upheavals—first in recording, then in distribution—is receiving more and more attention, from scholars and members of the scene alike. The structure of Jason Netherton's oral history of death metal, *Extremity Retained*, echoes these inflection points. While memories of tape-trading and travails in the studio run throughout the interviews, the final chapter—"Where Next to Conquer?: Then, Now, and Beyond"—is saturated with musicians contrasting the analog past with the digital present, largely in the register of a lament for a lost sense of mystery and value in the age of digital abundance. Scholar Ross Hagen, reflecting on his own discovery of black metal, strikes a similar note in his monograph on Darkthrone's *A Blaze in the Northern Sky*: "For black metal, as with similar musical styles, the loss of the comparative obscurity afforded by time and distance has had far-reaching effects that underpin its turn to nostalgia." Hagen, *Darkthrone's A Blaze in the Northern Sky*.

meaning—such as the *Canon* of the Greek sculptor Polykleitos, a guide to proportion—this affinity with measuring is most evident. Genres don't just regulate records; records are rulers that regulate genres, as the measure of their ongoing reproduction. But deriving these generic rules from records is a fraught endeavor.[22] Tasked with enshrining metal's laws, records turn into partial, unstable objects, destabilized by desiring subjects and their judgments.[23] As Chapter 3 shows, fans frequently debate whether or not an album's sound suggests the use of drum samples and whether or not this use is legitimate, bolstering their arguments with evidence drawn from extreme metal's documentation of its mediation. Where records fall under such aesthetic contemplation, they cannot help but point to bodies, performances, and processes.[24] And when the medium isn't a natural language, the tools used to manipulate the medium matter. Thus, when it comes to imagining records as being whole, knowledge of technologies of recording occupies a privileged position. But the traces left by technology, which the Imaginary attempts to harmonize with the Symbolic's laws and strictures, are ambiguous. Heard through the distance created by records, and from the perspective of different subgenres, real technologies are re-imagined.

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[22] Natural language, and law expressed in such language, exhibits this regular-regulative duality, as Gillian Rose points out: "on the one hand it is juridical, in the sense of observable regularities; on the other hand it is normative and litigious, an imperative which serves as the standard of value but which may be questioned." Litigating what happened to produce a record, however, requires different evidence than litigating written law. Rose, *Dialectic of Nihilism: Poststructuralism and the Law*, 113.

[23] Here, I depart from the work of Theodore Gracyk and Albin Zak. Gracyk holds that the records of rock and related genres are "autographic" artworks, which possess a materially instantiated "original" that is ontologically thick, saturated with the decisions and contingencies of particular performances and productions. Notated or orally transmitted musics, on the other hand, are allographic works, where each performance is an instantiation of a symbolic, ontologically thin structure. Gracyk, *Rhythm and Noise: An Aesthetics of Rock*, 39. Zak holds that records are "records are first of all about themselves, the physical impressions that they impart." The stability of this impression, pace Zak, is assured by listeners valuing them as objects imbued with the "power of resonance." Zak, *The Poetics of Rock: Cutting Tracks, Making Records*, 197. So far, so good. But when listeners hear a record through a genre, as something might or might not "properly" instantiate it, the imaginary result they judge is shaped by a thin symbolic and the ambiguously thick reality of the record's traces. This is particularly true in heavily regulated genres like extreme metal, which encourage critical listening and gatekeeping.

[24] For a concise explication of the embodied cognition underlying these inferences, see Hansen, *Making Sense of Recordings: How Cognitive Processing of Recorded Sound Works*. My dissertation, however, focuses not on general processes, but on how genre and the memory of technological mediation conditions particular, paranoid hearings.

In this dissertation's constellations, extreme metal construes its technologies in ways that mirror mediatic musicology's non-human actors: where I draw on anti-subjective media theory, like that of Friedrich Kittler or Wolfgang Ernst, I do so because often, extreme metal thinks—and desires—as they do. These disavowals and projections allow extreme metal's subjects to twist existing laws to their purposes, allowing them to slip through loopholes while prosecuting others. For example, Chapter 1 theorizes how pioneers of extreme metal reconcile creativity and orthodoxy by projecting agency onto the record player. When these musicians claim that they "found" what extreme metal was supposed to sound like by playing existing metal records faster or slower than intended, they disguise a willful innovation as an existing fact. To cite another case, Chapter 3 includes a detailed description of drum replacement as an automaton, a network of human, analog, and digital actors. This minimizes the agency of the engineer—and thus reconciles this intervention with the creative independence extreme metal demands of bands. Unable to see their own gaze, but more than willing to police that of others, these different ways of relating to technology assemble objects and subjects, casting humans both as masters and servants in this relationship.

As a methodology, constellations imply complex, even multiple perspectives. Before I situate my project in the larger inquiry into musical genre, let me extend Benjamin's metaphor to clarify the relationship between vernacular and scholarly theory in these constellations. Consider how from afar, a constellation of stars will appear flat. But were we to be transported to its center, the constellation itself would disappear from our view. From this new perspective, each star from the prior constellation now aligns with different stars in new constellations. Likewise, on the one hand, the chapters condense existing constellations in extreme metal's archive. Each isolates tensions between inherited values and technological progress, irritants around which subgenres formed like pearls. On the other hand, the

chapters also use the resulting contradictory perspectives to widen the scope and engage with critical discourses on technology beyond extreme metal.

Musical genre's material mediation

If constellations are how this dissertation is put together, genre is what it is about. But that "how" and "what" map onto each other. Increasingly, scholars are conceiving genres as dynamic constellations with irreducible materiality. That wasn't always the case, since it re-introduces the long-shunned notion that genres have a life of their own. Initially, the study of musical genre established itself as a riposte against organicist metaphors and Aristotelian essentialism. In 1981, Franco Fabbri mapped out a theory of genre, just as popular music was becoming an object of serious study. Indebted to structuralist linguistics, Fabbri focused on rules.[25] Musicians encode genre rules into their practices and records, listeners decode them. The materiality of musical practice is just an information pipeline: as in Norbert Wiener's cybernetic conception of language, software trumps hardware. Keith Negus aptly remarks that Fabbri's emphasis on rule-following was realized most when his interlocutors complained that their genres of choice were "dead" or "dying," by which they mean it is heard and reproduced along predictable lines.[26] Ironically, the structuralist code-decode paradigm anticipates the digital afterlife of once vital genres, where one has its archive laid out at one's fingertips.

During the 1990s and 2000s, the structuralist certitudes of past approaches to genre appeared increasingly suspect. Critical historical and historical sociological approaches, broadly post-structuralist, gained currency. Early in this period, film theory—most of all the works of Steve Neale and Rick Altman—destabilized high/low dichotomies and introduced a greater focus on reception.

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[25] Fabbri, "What Kind of Music?" Three decades on, Fabbri explicitly acknowledges the resurgent interest in genre's agency and softens "rules" into tacit "conventions." Fabbri, "How Genres Are Born, Change, Die."

[26] Negus, *Music Genres and Corporate Cultures*, 26.

Taking cues from Lacan and Jauss, Neale defined genres as "systems of orientations that circulate between industry, text, and subject."[27] Only at this point did the study of musical genre, historically reoccupied with creators and works, begin to consider the perspective of listeners. Keith Negus' *Music Genres and Corporate Cultures* foregrounds how organizational structures determine and conflict with what he calls "genre cultures," a conflict between economic value and the values of a group that asserts itself in extreme metal, too. Taking an ethnomusicological—and thus more bottom-up—approach, Fabian Holt's *Genre in Popular Music* concerns itself with how other genres responded to the success of rock music, and how jazz fits into the landscape of other genres and Chicago.[28] And long delayed, but clearly a product of that post-structuralist surge, David Brackett's *Categorizing Sound* probes how the top-down categorization of people and their music shapes and subverts what he calls fan-critic genres, the differences that executives have no patience for.[29] What unites them is an improvisatory pluralism and an interest in the contingency of big categories, rather than small differences. This dissertation shares the interest in naming but accords special attention to the material changes that prompted realignments between category and sound at the granular level of extreme metal's subgenres.

In the 2010s, scholars have begun to emphasize the materialist dimensions of musical genre—in the sense that Marxism is materialist, concerned both with the tangible "stuff" genres need to perpetuate themselves and the social relations mediated by and creating that stuff.[30] Georgina Born's work led the way: *in nuce*, her study of IRCAM was already a study of genre and its material instantiation, and her subsequent critique of Bourdieu's sociological deflation of aesthetics and cultural

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[27] Neale, *Genre*, 19.
[28] Holt, *Genre in Popular Music*.
[29] Brackett, *Categorizing Sound: Genre and Twentieth-Century Popular Music*.
[30] Sterne, "'What Do We Want?' 'Materiality!' 'When Do We Want It?' 'Now!'"

production sharpened the theoretical payoff.[31] Her thought on how temporality inheres in and connects art objects informs every chapter of this dissertation. Another key impulse comes from Eric Drott, who contested the idea that twentieth-century composers working in the Western written tradition had abandoned genre—even as they continue to materialize judgments and groupings.[32] But I have a terminological nitpick here. Both Born and Drott theorize genres as "assemblages," a concept drawn from Deleuze. In its original coining "assemblage" is deliberately anti-subjective and thus excludes value and judgment. But for Born and Drott, ideas do the assembling—even if somewhere along the way, they are recorded into objects and then recovered from them, however unfaithfully. Thinking of genres as constellations captures these idea-object-idea and object-idea-object exchanges and the variety of objects and actors that do the transferring.

The ideas circulating with a genre culture thus adhere to artifacts of material culture and mobilize us to associate and re-associate them, a process that's not quite alive but still might die. In his magisterial survey of musical genre in the long 1970s, *Living Genres in Late Modernity*, Charles Kronengold calls this property of genres "genericity."[33] Genres don't just sort objects, but draw out and amplify specific parts of otherwise indifferent objects. This property of genres—to cut across categorical levels, to atomize and fuse anew—is also observed by David Brackett.[34] This is precisely what Benjamin intends with the "extremes" that are gathered by ideas in a constellation. Such extremes

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[31] Born, *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde*. Born, "On Musical Mediation: Ontology, Technology and Creativity." Born, "The Social and the Aesthetic: For a Post-Bourdieuian Theory of Cultural Production."

[32] Drott, "The End(s) of Genre."

[33] Kronengold, *Living Genres in Late Modernity: American Music of the Long 1970s*, 20. The book was published late in the writing of this dissertation, but early enough for me to marvel at its account of how the long 1970 ushered in a landscape of musical genres where responding to detail mattered more than ever before. At a much smaller scale, I attempt something similar in this dissertation. Think 16x zoomed in, squarely on how media mattered in extreme metal's development.

[34] Brackett, *Categorizing Sound: Genre and Twentieth-Century Popular Music*, 327–28.

are parts of the objects gathered under the ideas of a genre (themselves, more likely than not, transmitted through objects), parts charged by those ideas and infused with enough energy to send jolts across individual and institutional memories. As Kronengold makes clear in the afterword, genres are not self-sufficient entities, even if they have their own values and aims: they need invested subjects to make their materials matter. Both the (libidinal) charge—a genre's details mattering to someone—and the material, the conductor for that charge, are key. That's also, why—at least in theory, and certainly, in the esteem of many fans—genres can die. While I agree with Kronengold that genres "have a life," I doubt that texts alone can preserve that life fully. In the case of extreme metal's set of subgenres and values, we might see the attachment to the material excess texts—the recorders for its records—as a particular form of life support.

Let me summarize my project, which takes these present attachments as a guide to extreme metal's contested past—and as a means of theorizing technology and change beyond extreme metal. With my constellations of generic norms and the "stuff" genre lives through, I don't mean to write an authoritative history of extreme metal—or to redefine its subgenres. Instead, I put narratives that diverged back together which were separated after subgenres solidified their identities. As far as the writing of histories goes, extreme metal musicians and critics are already doing that, more authoritatively than I could. But their labor is divided according to subgenres that emerged from common origins and thus projects present differences into past becoming. My dissertation restores that history's totality, cracked and contradictory, by pulling its diverging threads back into the orbit of the digital disruptions they seek to evade. You can think of it as *Kintsugi*, the Japanese art of mending broken objects with streaks of gold that call attention to the fault lines. By highlighting and probing the cracks opened by the analog-digital transition I reassemble extreme metal's subgenres into a process,

a process of coping with that juncture—from irreconcilable standpoints, and under a strict gaze from multiple sides.

A preview of the chapters

Since my goal is to further dialog between metal and media, past and present, vernacular and academic, I spell out historical background where it is needed. The chapters are cumulative and should be read in order, the following previews can only serve as a map of the historical and conceptual threads that run through them.

Chapter 1 examines how pioneering musicians imagined and desired (more) extreme metal through analog media and the manipulation of time they afford. I call this constellation *metal-becoming-extreme*, the status ante quo to the later chapter's digital fissures and realignments. The chapter theorizes genre as embedded in particular media ecosystems. It also introduces extreme metal's complex relationship to subjectivity and creativity, values that continue to inform later chapters. Alongside recent scholarship on musical genre, my main interlocutors are Friedrich Kittler and Jacques Lacan.

My entry point into the constellation of genre's symbolic laws and media's promise of real repetition are curious autobiographical anecdotes. Independently of each other, spread across the globe, hooked into trading networks, pioneers of extreme metal recall that they heard what its future was supposed to sound like—when they played existing, non-extreme metal records faster or slower than intended. Creativity and iteration—what gets you from just metal to extreme metal—is identified as *time axis manipulation*, the defining feature of technical media in the work of Kittler. Analog sound recording and playback can stretch, slow down, and reverse sounds. Performed on variable-speed record players, these operations draw super-humanly fast performances and beastly growls out of

existing records. The record player thus conjures a sublime blueprint, an imaginary-but-sensory alter ego to compete with and emulate. Finding—rather than creating—extreme metal also relieves its subjects from acknowledging their desire as theirs. The infidelities of analog media and the inscrutable wealth of the mysterious tape trading networks thus allow for tactical miscodings and failed repetitions, for loopholes in genre's law.

Chapter 2 suggests that the present controversy around drum replacement can be traced back to the moment that defined death metal's sound but undermined its values. The chapter constellates sample-based drum replacement and its interaction with the blast beat, an ultra-fast drum technique. The ramifications of these real and imagined techniques and technologies are central to the later chapter's subgeneric fissures. The chapter begins engagement with the musicology of record production, if only to the point where it can make the case that death metal needed drum replacement but couldn't tolerate it. The reason was death metal drumming's labor theory of value—which I articulate with Marx and the Marx exegesis of Moishe Postone and Sianne Ngai.

Today, the use of samples to reinforce or replace (acoustically) recorded drum performances is simpler and more ubiquitous than ever. But in the late 1980s, Morrisound Studios in Florida introduced drum replacement to death metal—and a scene began to form around the studio and its tech-processual leadership. Drum replacement allowed death metal to realize its intentions, at least on record. Before this encounter, bodies and recording technology couldn't keep up with its prestige drum technique, the blast beat. The blast beat was valued as concrete labor but measured using abstract time. Its most challenging variation, the single-foot blast—a technique you had to see because it sounded just like a blast beat that used two-foot pedals—was death metal's testosterone-soaked testing ground. But making the blast beat sound intelligible on record required interventions and reconstructions that

called physical labor itself into question. The symbolic demands of genre and the mediation of time return, however, this time, extreme metal was faced with a different outside, a different limit: capitalism's pressure on labor, which transform both time and technology.

The *Interlude* examines how another form of time axis manipulation mediates extreme metal's relationship to its outside. Against the backdrop of moral panics around the corrosive influence of hidden Satanic messages, the inclusion of backmasking—hiding a message by playing it backward—allowed extreme metal bands to embody the fears of concerned culture warriors and escalate earlier metal's relationship to the occult. This exoteric function of backmasking solidified the boundary against the mundane. But backmasking also was a practice of citing earlier introductions, of displaying knowledge of metal and horror movies—and thus an esoteric form of community-building. But one death metal band used that inter-metal bonhomie to challenge their peers by flaunting their virtuosity—and clarity of studio production that could be heard backward. Thus, the interlude also introduces the upcoming analysis of timbre and temporality on records.

Chapter 3 listens to asynchrony in extreme metal drum production in two ways: first, as traces of specific studio processes and technologies and second, as an index of unequal access to the former. In the late 1980s and early 1990s, drum sounds in extreme metal were highly diverse—and often problematic. Trying to solve the problems caused by the pursuit of new sonic extremes, studios improvised these solutions by combining new digital technologies with existing analog processes. Heard against Morrisound's death metal production, other solutions pointed to the constraints faced by bands that didn't have access to the Florida studio. To examine studio processes, the traces these processes leave, and how musicians, producers, and fans re-narrate and document the aftermath of digital re-mediation, I draw on the studies of the analog-digital transition by Samantha Bennett, Anne

Danielsen, and Ragnhild Brøvig-Hanssen, as well as recent media theory by Sybille Krämer and Wolfgang Ernst.

This constellation is organized around a mode of vernacular analysis common among extreme metal aficionados. Fans try to divine the specific studio processes and gear used in the creation of an album, often with the express aim of making a claim for or against its claim to being authentic—in line with the law. Extreme metal's highly standardized instrumentation—distorted guitars, bass, drums, and vocals—draws attention to the audible differences that specific devices and studio processes make. I survey death metal albums that exhibit "failed" production: at first, because there was no standard modus operandi, later, because of dependence on Morrisound's trailblazing efforts. Based on interviews and hardware specifications, I excavate Morrisound's analog-digital hybrid methods. Negotiating between human, analog, and digital temporality with less-than-mature equipment, left conspicuous glitches that remain controversial in the present. When engineers re-narrate this setup as an automaton, this serves to minimize their own agency—and thus satisfies the creative independence that is demanded of extreme metal bands.

Chapter 4 argues that when grindcore bands re-recorded their earlier songs in death metal's production paradigm, they revealed the loss of an earlier form of extremity—and thus clarified what grindcore had been about in the first place. It engages with scholarship on punk-metal hybridity and develops an analytical approach to formal processes informed by historically specific subgenre formations and shifts in studio production. This supplements recent music-theoretical interest in the embodied experience of meter in metal music, which has been unduly concerned with parameters comfortably presentable using Western notation. By contrast, grindcore's original formal process evoked extremity by pushing beyond what the recording studios available to it were able to represent.

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This constellation is unified by grindcore's name, one of many subgeneric labels signifying a punk and metal crossover. Placed in its original contexts, the term also pointed towards a formal process built from framing sped-up anarcho-punk with leaden but catchy grooves drawn from extreme metal. These grooves lull listeners' bodies into moving to relaxed cross-rhythms, only to then pull the carpet with an unbalanced slurry of blast beats and ultra-repetitive strumming patterns. This denial of pleasure didn't just signify political agendas—it also was premised on recording technology breaking down alongside the groove, even if this could only be recognized in hindsight. As death metal pushed extreme metal production towards digital clarity, grindcore lost the blast beat in its own way. This becomes evident in death metal re-recordings of former grindcore songs, which remove or dilute blast beat sections that lost their function when subjected to the dynamic and temporal evenness of extreme metal's digital future.

In *Chapter 5*, I challenge the notion that black metal's "lo-fi" aesthetic is just a return to the analog past. Rather, with three brief exhibits, I show how the subgenre is a post-digital phenomenon that draws from three sources: first, the analog past; second, opposition to the digital hyper-realism of death metal; and third, the loop-based formal designs of electronic dance music. This sequencer aesthetic was radically new, unattached to embodied performance in ways unprecedented in metal music—but it could only be smuggled in by pointing to death metal's digital transgressions and acting out an outward analog revival. This relief from responsibility, I suggest, is one of the perennial attractions of object-oriented ontologies—from Heidegger onward. Moreover, probing homologies between metal's attachment to imagined and real technologies objects exchangeable and singular, allows for new perspectives on the political differences between subgenres—and the fantasies of independence that long covered fascist ideologies in black metal, the dark flowers of the worship of

the concrete.

In a brief *Postlude*, I spool forward to extreme metal's present, of looping revivals and reproduction, marked by its equally traumatic and productive encounter with digitalization. The loss of limits and resistance—in accessing and achieving new extremes—is a crisis for extreme metal. In the end, memorization and analog talismans do not resurrect limits that can be productively transgressed—just a bittersweet memory of inconvenience.

CHAPTER 1. METAL-BECOMING-EXTREME

Ultimately, the phonograph records are not artworks but the black seals on the missives that are rushing towards us from all sides in the traffic with technology; missives whose formulations capture the sounds of creation, the first and the last sounds, judgment upon life and message
about that which may come thereafter.
— Theodor W. Adorno, The Form of the Phonograph Record[1]

The record player's prophecy

When extreme metal fans recall discovering their music of choice, they customarily describe it as a shocking revelation, followed by a frantic pursuit of more extreme metal: more of it, but also more extreme. Before file-sharing and streaming services rendered even obscure music easily accessible, that search for more extreme metal was arduous, but also exciting. You might have to travel far to get to a more adventurously stocked record store. A friend might pass you a compilation that contains a shocking gem; one of your pen pals might send you some unheard horrors through the postal system. What else was out there? Desire was stoked further by the distances and delays of extreme metal's original media ecosystem.[2]

But what of the more radical case, where extreme metal is desired before it even exists? We may observe this proleptic desire in the origin story of Hellhammer, a Swiss band often considered a protean prototype for later extreme metal. When Thomas Gabriel Fischer remembers what drove him to found the short-lived, often-venerated, often-ridiculed band in 1982, the sequence I outlined before—

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[1] Adorno, "The Form of the Phonograph Record," 61.
[2] Media ecology (the study of media as an artificial environment that structures and sustains way of life) goes back to Neil Postman and, ultimately, Marshall McLuhan. The field of studying media is fragmented and the fault lines are (or were) contentions. Academically, the notion that media might determine anything was controversial while digital technologies were in the (marketing-supported) ascendancy during the 1980s and 1990s. As Jonathan Sterne observes, the earlier constructivist fundamentalism began to fade in favor of accounts that balanced social construction and material constraints. After 2016 and broad concerns about the impacts of social media on public discourse and individual psychology, a further shift may be on the horizon. Sterne, "'What Do We Want?' 'Materiality!' 'When Do We Want It?' 'Now!,'" 124.

discovery, desire, pursuit of more—remains in place.[3] But the catalyst that reveals his calling and drives

a wedge between the convert and the unbelievers is curious. With its command over time, the record

player reveals the aural image of future heaviness and extremity.

> Grave Hill began to disintegrate the very day I returned from England with Venom's debut 7"
> vinyl single, then the absolute cutting edge of radical, dark metal, and began to play it slowed
> down from 45 rpm to 33 rpm to make it sound even heavier and more extreme. The other
> members of Grave Hill just stood there in complete disbelief. Their realization that I was utterly
> driven for ever more extremity in my music marked the beginning of a severe erosion of their
> commitment toward the band. The incessant radicalization I pursued so fanatically was alien
> to them, and they soon began to exit the group one by one.[4]

Fischer's narrative articulates a now-obsolete constellation of media, genre, and desire—which I suggest

we understand as a fantasy with material props that pushed the desire for more extreme metal.[5] In a

preliminary exegesis, I tease apart the moving parts of this fantasy in Fischer's narrative, which

introduces—in condensed form—the cornerstones of the argument I pursue in this chapter: the initial

desire for more extreme metal was premised on distance and inconvenience that was lost together with

its original analog media ecosystem.

Curiously, in this origin story, Fischer disavows his own creativity. This disavowal hinges on a

constellation of existing norms of genre and the (re-)productive powers of analog media. At its center

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[3] I understand memories as reconstructions of the past that meet the demands of subjectivity in the present, especially in the face of challenges to an identity. In conceptualizing the role of memory as evidence, I follow Alan Megill, who cautions that "memory, far from being history's raw material, is an 'Other' that continually haunts history. Memory is an image of the past constructed by a subjectivity in the present." What makes it Other to history is its subjectivity, that is, its imposed coherence. In their own ways, both historical method—citing objective, occasionally inconvenient evidence—and psychoanalysis challenge the oneness of memory. Megill, *Historical Knowledge, Historical Error: A Contemporary Guide to Practice*, 57.

[4] Though I offer evidence that is independent of Fischer's memory below, Fischer's changing attitude towards Hellhammer strengthens the credibility of the narrative. The anecdote was first formulated at a time when Fischer rejected Hellhammer as "a curse" and "clone", yet it remained substantially the same once he made his peace with the band's legacy a decade later. The earliest version I could locate is found in Fischer, *Are You Morbid?: Into the Pandemonium of Celtic Frost*, 64.

[5] Though I offer evidence that is independent of Fischer's memory below, Fischer's changing attitude towards Hellhammer strengthens the credibility of the narrative. The anecdote was first formulated at a time when Fischer rejected Hellhammer as "a curse" and "clone", yet it remained substantially the same once he made his peace with the band's legacy a decade later. The earliest version I could locate is found in Fischer, 64.

is a record, in the standard 7-inch single format played at 45 rotations per minute (from here on abbreviated as "rpm"). *Welcome to Hell*, by the British band Venom. By assigning a genre to this record—metal—and modifying that genre with the adjectives "radical" and "dark," Fischer locates this record at a threshold—"the absolute cutting edge." The mediating third term that destabilizes both the material record and its generic symbolization is the variable speed playback of the record player. T*ime axis manipulation*, as Friedrich Kittler calls it, materialized in consumer electronics. The record player knows no symbols nor what metal is—and yet, when it slows down the inscription on the Venom vinyl, it produces sounds that Fischer can fit into metal's symbolic order once more. He calls the result "heavier and more extreme:" a sonic escalation that creates meaning and pleasure in excess of anything recorded. This pleasure—the encounter with metal made more extreme in playback—reorganizes Fischer's life, widening the gap between him and those who fail to hear its call. Fischer describes this calling in subjective and objective terms. It is a "drive" that compels him, but one he identifies with and takes up as his desire. To him, Venom's music is already more extreme metal when stretched in playback. And these sounds *should be* repeated—that is, (re-)recorded. The record player's mastery of the time axis allows Fischer to disavow his creative will: he was merely repeating what he heard.

In this chapter, I argue that attributions of creative power to analog media compel us to reconsider the feedback loop between media and genre that ignited metal music's process of sonic escalation in the early 1980s. I will call this process *metal-becoming-extreme*, extreme metal in the process of becoming, before it crystallized into stable subgenres and acquired that *post hoc* umbrella term. This process was driven by desire, or, more precisely, by a fantasy that channeled and deferred satisfaction—the titillating idea that somewhere, out there, more extreme metal already exists. When

this fantasy is given audible shape by manipulating the time axis of existing metal records, this only speaks the truth of why metal-becoming could present itself as not needing creation—but as an automatic product the command technical media had over time, the media sublime at work.[6] In fantasy, extreme metal already existed out there, behind the veil imposed by recording, replaying, and receiving it in its analog media ecosystem.

Other extreme metal pioneers offer similar narratives of discovering its sounds in re-purposed records. Throughout the chapter, I use two autobiographical narratives to anchor my argument. In addition to Thomas Gabriel Fischer (aka Satanic Slaughter, aka Tom G. Warrior) of Hellhammer, my other main interlocutor is an Australian man known only as "Rok," who went on to found Sadistik Exekution. Though I have come across further anecdotes, my argument does not hinge on how widespread the practice of manipulating metal's time axis was.[7] Instead, it is the structure of this fantasy that deserves our attention—why these narratives are intuitively credible to metal fans, to the point that they are unmarked stations of broader autobiographical statements. I suggest that this is because they elegantly capture means of accessing more extreme timbres and tempos that allow musicians to avoid taking responsibility for creating them. Far from being mere curia, these recollections articulate the genre's fundamental fantasy. Under metal music's generic norms, the distorted voices and detuned riffs produced by time axis manipulation could serve as templates for future repetitions. The now-lost analog ecosystem supported the desire for extreme metal a hard-to-own, hard-to-incorporate object of

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[6] Here, the "sublime" of media is the command over the time: to repeat, compress, or stretch what humans cannot escape. The media sublime can also be understood as the repetitiveness of commodity culture and advertising, which Robert Fink has fruitfully related to the effects of process music. Fink, *Repeating Ourselves: American Minimal Music as Cultural Practice*, 120.

[7] Such as by Karl Sanders, guitarist of death metal band Nile, recalling how Morbid Angel's 1987-1988 drummer Wayne Hartsell "couldn't afford death metal records so he took his Iron Maiden records and spun them at 45, and swore that it was every bit as meaningful as that death metal stuff that everyone was listening to." Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 77.

desire.

My inquiry has ramifications not just for the growing body of metal music studies but also for recent attempts to theorize genre in materialist-relational terms. As I noted in the Introduction, so far, scholars have emphasized this escalation of a genre as fundamentally Other-oriented: a wish to symbolically differentiate oneself from "abject" and "decadent" strains of metal. While this broadly post-structuralist understanding captures the anxious attempt to *stabilize* an existing identity, I instead focus on how unprecedented sounds became repeatable—that is, generic—without having to be acknowledged as new. The media-supported disavowal I analyze also helps explain forms of attachment to extreme metal, notably the tendency of fans to explicate their preference for the music based on ostensibly objective, even physical properties, like "heaviness"—as opposed to emotional or personal resonances. Finally, reaching beyond metal, we should understand the desire that drives genres as channeled by the materiality of media that make that genre's sounds and meanings repeatable—and, while its symbolic content might be transferred onto new media, the desire sparked by now-lost inconveniences may not be transposable.

On the level of method, my readings of autobiographical narratives and artifacts require a conceptual apparatus that allows me to navigate the feedback between the material and immaterial. In its strategic mis-hearings, metal-becoming-extreme re-translates material accidents into generic essentials. While words such as "constellation," might suggest a flat ontology, like a Latourian network of undifferentiated actors, this is just one side of what I intend to theorize. The collection of material "stuff"—tapes, vinyl, playback devices, xeroxed artwork—is irreplaceable. Otherwise, its loss would not be mourned. But to become productive, to become more than it already is, this material has to pass through subjectivity: it does so in fantasy, a stage on which "stuff" becomes an object of desire,

where subjects orient themselves towards what metal *could* and *should* be. In sum, rather than taking a stable *via media*, the current of my argument jumps through subjectivity into objectivity—and back again. To achieve this, I combine Kittler's materialist media theory with Lacan's psychoanalysis—but I do not side with Kittler reducing psychology to the automatic effect of media.

First, I provide a sketch of *metal-becoming-extreme* in its original analog media ecosystem. In autobiographical narratives, musicians, fans, and fan-scholars of extreme metal disclose how tape-trading networks delayed and heightened the pleasure of discovery, with distance, scarcity, and terminological indeterminacy becoming objects of nostalgic attachment in their own right, which I begin to theorize using a Lacanian framework. In a second step, I bring this rudimentary model of mediated desire into dialog with existing scholarship on genre and repetition in metal music and beyond. I contend that no theory of genre can do without some minimal notion of repetition. Yet the conditions of this repeatability—who or what does the repeating—are often not addressed and implicitly identified with the Symbolic. To theorize the real repetition afforded by media in my close readings, I combine Lacan's notion of fantasy with Kittler's concept of time axis manipulation. Unlike Kittler, I strive to preserve subjective factors: judgment and desire, where subjectivity imperfectly re-translates the Real into the Symbolic, with the leftover noise of the medium being the excess that is enjoyed.

Desiring media ecosystems

In this section, I formally introduce and justify my concept of *metal-becoming-extreme*, which attempts to capture the indeterminacy of genre in the tape-trading underground—and how together with the resistance of its analog media, this indeterminacy pushed desire. I argue there are two prevalent shortcomings in prevailing approaches to the origins of extreme metal and its media ecosystem: over-

specifying the fixity and univocity of subgenre at this point in time and under-specifying the contributions of analog media, respectively. While all later subgenres of extreme metal trace their origins to these informal trading networks, we should not project later categories onto what was exciting because of its under-determination. Under these conditions, desire was further pushed by the resistance and interference of analog media. Theorizing this process of repetition allows us to conceive of *metal-becoming-extreme* as an object-oriented process of iteration, as opposed to a rejection of insufficiently extreme others.

Undifferentiated origins in the underground

Extreme metal's origins were multi-polar and distributed in a slow-moving, pre-digital cloud. In the early 1980s, what would become extreme metal was not developed in a single, geographically bounded scene but spread by actors participating in a global network of letters, tapes, and do-it-yourself fanzines.[8] As a shared point of origin (an innocent beginning—if there can be such a thing for a collection of music that tries to be anything but innocent), the tape-trading underground has become an object of increased scholarly inquiry and nostalgic attachment among metal fans. Before theorizing this affective dimension, I will describe this historical media ecosystem and clarify the terminology. Some of this terminological clarification requires me to explain just how *unclear* terminology was at that time: which is why in this chapter, I will designate this constellation of people, objects, and practices, animated by desire and productive of what is now called extreme metal, as *metal-becoming-extreme*.

I introduce this neologism to avoid a familiar pitfall of talking about genre, namely, projecting later categories onto a messy primordial soup of practices and categories. When we parse such simple

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[8] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 78.

and undifferentiated beginnings, we do so from the vantage point of later complexity and differentiation. The study of extreme metal's emergence faces a quandary that psychoanalysis also faces: the vocabulary we draw from this mature standpoint cannot help but do epistemic violence to its origin.[9] In the early 1980s, subgeneric labels like "death metal" or "black metal" already circulated within the letter- and tape-trading networks. However, the tags were more loosely attached to specific sounds, lyrics, and visuals.[10] In retrospect, musicians and authors that identify with particular subgenres read the shared wellspring through this allegiance, with some publications centering on national scenes.[11] Since these publications serve the needs of present identities, the result is that much of the scene's historiography is segregated according to subgenre, even if all these histories emanate from a shared fountainhead.[12] Though numerous scholars have pointed out that "extreme metal" is an umbrella term that post-dates the formation of subgenres, they rarely draw methodological consequences from this.[13] Thus, vis-à-vis extreme metal or its subgenres, my notion of metal-

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[9] Freud faced backlash for analyzing the child's relation to pleasure and displeasure through the lens of adult sexuality. From the moral standpoint of adulthood, this view back is outrageous—because it imposes morality on a pre-moral state.

[10] Numerous examples of later subgenre labels being used interchangeably can be found in fanzines that were key to disseminating paratexts that explicated the traded tapes. In the mid-1980s, *Slayer Mag,* a particularly influential fanzine, labels Voivod as "death/thrash/black/speed metal", Possessed as "Death Metal", but also as "Thrash/Death/Speed Metal" (in the same issue). Kristiansen, *METALION: The Slayer Mag Diaries*, 54, 62. Eric Smialek quotes Deicide frontman Glen Benton to underscore this point: "I listened to everybody in the 80s, man. […] There was no such thing as death metal when we were listening to this shit, it was just metal. It was either black metal or it was metal. And what was black metal back then is considered to be death metal now; anything that dealt with Satanism we called black metal, like Venom." Smialek, "Genre and Expression in Extreme Metal Music, ca. 1990-2015," 29.

[11] A non-exhaustive list: Purcell, *Death Metal: The Passion and Politics of a Subculture*. Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016. Ekeroth, *Swedish Death Metal*. Howells, *Black Metal: Beyond the Darkness*. Phillipov, *Death Metal and Music Criticism. Analysis at the Limits*. Howells, *Black Metal: Beyond the Darkness*. Netherton, *Extremity Retained: Notes from the Death Metal Underground*. Johannesson, *Blood, Fire, Death: The Swedish Metal Story*.

[12] Ross Hagen has pointed out that metal historiography is vulnerable to canon formation, much like Western art music. Its history is told with a "standard arc that culminates in an aesthetic 'Golden Age' that retroactively organizes the entire enterprise." Hagen, *Darkthrone's A Blaze in the Northern Sky*.

[13] Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics," 244. Smialek, "Genre and Expression in Extreme Metal Music, ca. 1990-2015," 64. As late as 2000, pioneering metal scholar Deena Weinstein did not use the now ubiquitous "extreme metal" label, holding onto an earlier umbrella genre coined by her: "fundamentalist metal." Weinstein, *Heavy Metal: The Music and Its Culture*, 49.

becoming-extreme attempts to do justice to this state of flux. This flux was only arrested when some

bands began to leave the relatively level terrain of the analog underground, once the backing of labels

and advances in recording technologies reinforced boundaries that were still shifting in the near-

egalitarian trading networks.

With a relatively low barrier to entry, these tape- and letter-trading networks allowed

participation in a creative process and community even from locations that hitherto were not centers

of music or metal production. Scissors, typewriters, and hand-drawn artworks were glued together and

multiplied by a xerox copy machine: these were the means of producing fanzines that disseminated

interviews and reviews and inlays for tapes. Portable recording equipment (sometimes even just

boomboxes), blank TDK tapes, and some friends willing to form a band was all it took to release music

in this context. Consequently, hitherto marginalized locations now could gain a voice in these

networks: Fischer formed Hellhammer in rural Switzerland, the connections he formed with band

members and eventual pen-pals served as a welcome reprieve from an abusive mother and a stultifying

apprenticeship.[14] Rok, for his part, started Sadistik Exekution in the Australian equivalent, "the bush,"

far away from Sydney.[15] Both were isolated, and both recount having to travel to buy recent metal

vinyl records, which were often sold out at the few stores that carried them. Scarcity and distance were

objective barriers—and a powerful impulse for fostering connections across geographic distance via

the postal system. The tape-trading underground was a "constellated community," to use film and

genre scholar Rick Altman's term for dispersed communities formed around shared tastes, made

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[14] Patterson, *Black Metal: Evolution of the Cult*, 37, 43. Fischer's frankness about his emotional experience, be it in the context of his upbringing or his sexual relationships, is uncharacteristic in the context of extreme metal. A number of the Amazon.com reviews for *Are you Morbid?* thus express discomfort at this fact. It is not the topics touched on that seems to take metal fans aback, but the fact that Fischer acknowledges his emotional response to them.

[15] "You see, I lived well away from any other 'headbanger' and didn't have a clue as to how I could find something heavier, or even if it existed. I had no idea of what went on in the cities, or that there were other idiots out there who shared my interests." Kristiansen, *METALION: The Slayer Mag Diaries*, 354.

possible by increasingly affordable technological means of publishing and promoting music.[16]

At the same time, real inequalities in available infrastructure existed, which meant that the earliest models for repetition emanated from an affluent center. While the 1980s tape-trading underground quickly became global, its origins can be traced to musical and institutional impulses from Britain.[17] The so-called New Wave of British Heavy Metal was a response to punk, which, according to Steve Waksman, showed that "heavy metal could be brought back down to the grassroots level" after increasingly showy, big-budget productions.[18] For Fischer, the "NWOBHM rendered London the center of the metal world," while Rok opined that the hostile deserts of Australia would have been a more fitting birthplace for hellish metal than the green downs of England.[19]

One of the preconditions for increased underground creativity was the emergence of independent labels that focused on lower-budget productions. Neat Records, founded in 1979 in Newcastle, England, was a realistic goal for bands emerging from the tape-trading networks and a pipeline to more prominent labels for some select few of them.[20] Neat's success—the fact that it carved out a niche for itself, even if most of its bands never made it to major labels—helped set a precedent for other independent labels instrumental to metal-becoming-extreme, such as the Californian Metal Blade Records (1982) or the German Noise Records (1983). This renewal from the grassroots up, mediated by a new crop of smaller labels, was not unique to metal-becoming-extreme but represented

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[16] Altman developed this notion in response to Benedict Anderson's influential notion of "imagined communities", a coinage that has sometimes been used to capture the extreme metal underground. But Anderson meant to capture the sense of *unified* national experience created by the circulation of shared newspapers in the early 19th century. By contrast, Altman's term registers subsequent a subsequent expansion of the media landscape, which supported more granular—constellated—communities. Analog and digital means of self-publishing intensify this fragmentation. Altman, *Film/Genre*, 198.

[17] The geographic distribution was still skewed towards Western Europe and the US, but with significant participation of South American and Japanese musicians already by the early 1980s. Chapter 5 takes up a curious history of Marxist internationalism in black metal's opposition to US (death metal) hegemony.

[18] Waksman, *This Ain't the Summer of Love: Conflict and Crossover in Heavy Metal and Punk*, 209.

[19] Fischer, *Only Death Is Real: An Illustrated History of Hellhammer and Early Celtic Frost, 1981-1985*, 27.

[20] Waksman, *This Ain't the Summer of Love: Conflict and Crossover in Heavy Metal and Punk*, 187.

a broader trend of the 1980s, supported by more affordable consumer electronics.[21]

Venom, Neat's most infamous acquisition, supplied the blueprint for virtually all early underground metal bands. The conventions established by Venom—in word, image, and sound—weren't just edgy and new, they also would've seemed achievable to bands operating on a shoestring budget. Part of the trio's appeal was its shock value. While in earlier metal music, Satanic topics occur in Christian moralism and mysticism, Venom weren't shy with their sympathy for the devil.[22] In their hedonistic lyrics, the horned outcast becomes the antithesis to stuffy work ethic and puritanism. Sex, drugs, and Satan. All band members took on occult-sounding aliases, a practice that Hellhammer, Sadistik Exekution, and numerous black metal bands in the 1990s would emulate. And, speaking of "black metal," Venom popularized that label, too. While they did not insist on "black metal" being an exclusive genre label in the 1980s, Waksman notes that the band was perhaps the first to "deliberately seek a more limiting classification for itself."[23]

But lip service to Satan or a genre label were always effortlessly repeatable: visual artwork and sounds, on the other hand, presupposed more technology than the word. Here, Venom's starkly monochrome designs departed from both the colorful airbrushed artwork of contemporary NWOBHM bands like Iron Maiden and the psychedelic visuals of earlier heavy metal bands like Black

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[21] Independent rock music of the 1980s was supported by a media ecology and institutions not unlike those of the metal underground at the time. As a high-level categorization, indie rock encompassed the intensification of punk in hardcore by the likes of Black Flag, Sonic Youth's continuation of Downtown experimental music in a rock format, as well as Hüsker Dü's introspective proto-emo. What united the geographically disparate scenes, according to David Brackett, was its anchoring in networks constituted by fanzines, college radio stations, and independent labels such as Long Beach's SST. Operating just above the economic threshold of DIY, the stark black-and-white, quasi-xeroxed artwork on many early releases aptly echoes the analogue lo-fi production values of the records, establishing a template for the cassette and boombox fetish that 1990s inheritors like the Mountain Goats adopted in the face of the triumph of the CD and digital recording. Brackett suggests the indie rock network was a means for Gen X to differentiate themselves from the tastes and institutions of their Baby Boomer parents, which holds equally true for the metal underground. In the 1990s, sounds pioneered by these formerly underground scenes—indie rock and metal—would break into the mainstream as grunge and nu metal, respectively. Brackett, *The Pop, Rock, and Soul Reader: Histories and Debates*, 503.

[22] The Interlude examines this shift in greater detail.

[23] Waksman, *This Ain't the Summer of Love: Conflict and Crossover in Heavy Metal and Punk*, 195.

Sabbath. Significantly, little information would be lost in running Venom artwork through a black-and-white copy machine. Musically, Venom stripped down metal to something close to punk, but also something that did not have to be acknowledged as punk and partook of metal's orientation towards the fantastic and anti-mundane. Thus, their sound was also within the bounds of what an aspiring underground band could hope to repeat with minimal capital.

To summarize, the process of metal-becoming-extreme in the tape-trading underground presupposed an assortment of consumer technologies—tapes, records, and copy machines—to produce the artifacts that circulated in it, but it also needed records—sounds, images, and words—that could feasibly be produced and disseminated in that context, with those technologies. What put the parts of this machine into motion was desire—an "adolescent male" desire, as Fischer puts it self-deprecatingly, "when it's possible to get totally excited over something about which others only shake their heads."[24]

New extremes, but not too close and not too soon

Discovering Venom often was synonymous with finding the tape-trading underground. A world of possibilities disclosed through a record, a single object that promised more. That "more" was elusive in this media ecosystem, however. It might arrive late, in a degraded copy. And if what does arrive does not satisfy you, there's the nagging suspicion that some tape out there (that you haven't heard about yet) could. These inconveniences only added to the allure of that inscrutable "more," which I theorize using some core concepts from Lacanian psychoanalysis. I begin with desire, to which I add fantasy in the following subsection.

Recalling the opening quote, the desire sparked by Venom (and slowing it down) redirected

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[24] Fischer, *Are You Morbid?: Into the Pandemonium of Celtic Frost*, 64.

Fischer's life. As a force that gives us direction, desire as such is not meant to be satisfied—and even has to be prevented from being extinguished by satisfaction. Extrapolating from Freud, Lacan characterizes this higher-order desire as "the desire to have an unsatisfied desire."[25] This desire of a higher power—desire squared, or desiring desire if you will—is maintained by a logic of substitution, which Lacan models with the subordination of the signified under the signifier. That signifier organizes the desires for manifold objects; in the Lacanian jargon, it is desire's object-cause: the lack in the Other, or, in simpler terms, what the subject thinks it needs to attain or become to earn its place in the world it is born into, to become whole again. In the absence of this already-lost wholeness, desire is split into partial drives, a wordless restlessness: gravitational centers that pull objects into their orbit but never actually meet them since their purpose is to keep desire spinning. Thus, distance, infinitesimal as it may be, and substitution, are vital to maintaining the Perpetuum mobile of desire. In the case of metal-becoming-extreme, this permanent place of desire, a place from which to keep desiring, was maintained by the resistance of media deferring this return—promising a beyond that never arrived in a conclusive, uncorrupted form.

Such narratives of discovering desire, like the one reported by Fischer, are common among metal fans and musicians. They frame their first exposure to these new sounds as a life-changing encounter with an object of sublime pleasure. This *jouissance* reorganizes their libidinal economy and sends them on a feverish quest for more and more extreme metal.[26] One of Keith-Kahn Harris's interlocutors, Eli, recalls: "When I hear Venom, Venom my whole life changed till today […] I put it

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[25] Lacan, *Écrits. The First Complete Edition in English*, 518.

[26] Ordinary and extra-ordinary pleasure may be related to initial inscription and subsequent generic repetition, as Roland Barthes has done: "Text of pleasure: the text that contents, fills, grants euphoria; the text that comes from culture and does not break with it, is linked to a *comfortable* practice of reading. Text of bliss (jouissance): the text that imposes a state of loss, the text that discomforts (perhaps to the point of boredom), unsettles the reader's historical, cultural, psychological assumptions, the consistency of his tastes, values, memories, brings to a crisis his relation with language." Barthes, *The Pleasure of the Text*, 14.

on the stereo, and you know everything was like Chhhhhhhhhh, and I didn't understand nothing you know […] I get into this and try into this, and I try to find lots of bands in this kind of style […]." Another, Ulf, gets involved in cross-continent trading after hearing a song on college radio, recalling that the music he received was more extreme than what he had hitherto known in part because it was significantly degraded: "[…] often these tapes were kind of you know, copied loads of times so the quality was kind of really noisy and stuff which added to the attraction I guess."[27] I will return to the subject of noise in due time. For now, note how these fans foreground the overwhelming materiality of the objects they desire: it conquers them physically. For them, the attraction is not a matter of their taste or preference.

This way of explaining one's desire, where subjective emotion is bracketed in favor of objective attributes, is typical of extreme metal genre culture.[28] Reflecting on his ethnography, Kahn-Harris notes that fans of this music tend to evade requests to elaborate on their relationship with music in personal, emotive terms, which he interprets as a reluctance to clarify how this music might be about their selves and their bodies.[29] In Lacanian terms, this mapping of object/other onto oneself would be considered an imaginary relationship. In other genres, such as pop, imaginary identification with the emotions or biography of an artist is more commonly enunciated and explicitly encouraged. No doubt it still takes place in extreme metal, but in a repressed way. But unlike Kahn-Harris, I don't see this lack of emotional granularity[30] as an obstacle to understanding the desire for (and sparked by) metal-

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[27] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 56–57.
[28] And, it should be noted, associated with hegemonic notions of masculinity. Robert Levant has called this phenomenon *normative male alexithymia*. The concept of alexithymia, which implies a lack of words to capture emotion, was initially coined by Freud. Given that the genre culture is dominated by men, the brute fact of this avoidance of emotion is not surprising—what interests me is how this avoidance becomes a site of meaning-making and enjoyment in its own right. Levant et al., "The Normative Male Alexithymia Scale: Measurement of a Gender-Linked Syndrome."
[29] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 54.
[30] The concept of emotional granularity, coined by Lisa Feldman Barrett, refers to an individual's ability to differentiate, categorize, and articulate their emotions—with language being the only way to access this data, these factors

becoming-extreme.

Instead, I suggest that this "exterior" characterization of what makes metal desirable reveals the nature of that desire—and that of desire in general. To pick up a thought from before, desire is protected from us fulfilling it by appearing as the desire of the Other. The lack we perceive in the domain of pre-existing language, law, and culture, Lacan's capital-S Symbolic.[31] This helps us understand the difference between demand and desire. Demands are explicit, fulfill finite needs, the needs of existence—like the scream that demands nourishment fulfills the need to eat or the demand that the scream be stopped. Desire, however, is the beyond of demand: implicit, infinite, unfulfillable, and impossible to own, for it reaches beyond finite biological existence. Desire is the demand for love and wholeness, a return to a lost oneness with the (m)Other, or more appropriately: the care we received as hapless infants, long before the giver of that care and we were separate.[32]

The exteriority of desire is key to understanding why distance was so important to metal-becoming extreme. As the demand to be the object of the Other's desire, desire *ex-ists*: as the pull towards what the subject's existence lacks—an out there, an anywhere but where its, especially when its basic appetites are sated.[33] For these fans, the pleasure they experienced was not about emotional or biographical resonance. If you accept that music resonates with you *because* it fits and articulates your adolescent emotions and experience, you cannot possibly regard it as sublime—as a lodestar that might guide you *out* of that predicament. The alterity of the object is critical: metal-becoming-extreme is not an object once lost but an object never quite found. Nonetheless, the converts of metal-becoming

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are hard to untangle. Emotional granularity is a scale with alexithymia on the one side and emotional competence on the other. Hoemann, Feldman Barrett, and Quigley, "Emotional Granularity Increases with Intensive Ambulatory Assessment: Methodological and Individual Factors Influence How Much."

[31] I use lower-case "symbolic" as both an adjective and noun to denote more restricted domains.
[32] Lacan, *Écrits. The First Complete Edition in English*, 525.
[33] Lacan, 525.

extreme still wanted to get closer to it—to objects that could repeat the overwhelming impression of the initial encounter with it.

The analog materiality underlying metal-becoming-extreme maintains the distance that fuels desire. In these narratives, excitement is closely linked to the frustrations of the media that carried it— indeed, often, these media are posited as its cause. I will call it the slow-is-exciting trope. This titillating slowness—the erotics of tape-trading—is highlighted by Fischer, who recalls that "[t]rading was an often tedious process." The wait involved in discovering new bands and eventually exchanging tapes produced an "intensity and sense of exhilaration" that he immediately contrasts with the intangible and instant access to information on the Internet.[34] Scholars of metal music, often fans and musicians in their own right, also center on this experience. Ross Hagen, recollecting his discovery of black metal, contrasts the wait and scarcity of those days with the instant (non-)gratification of the digital age in the same way.[35] And in a study more closely focused on death metal, Jason Netherton reports how musicians fondly recall the reciprocity of traders and the slow-is-exciting trope.[36] The time it took for tapes, vinyl, and other physical media to arrive at their destination emerges as another difference that media made, even if its function for metal-becoming-extreme remains undertheorized.

The prevailing underspecification of analog media in metal's history reflects competing paradigms in media studies: a communication-focused that competes with its more materialist leanings. When the focus is on communication or transmission, media become neutral carriers of information, a mere relay for messages sent and received across distance. The focus is on the symbolic content that is transferable. If, however, the scale tips on the side of materiality, other impasses emerge.

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[34] Fischer, *Only Death Is Real: An Illustrated History of Hellhammer and Early Celtic Frost, 1981-1985*, 109.
[35] Hagen, *Darkthrone's A Blaze in the Northern Sky*, Chapter 4, "The Pagan Winter."
[36] Snaza and Netherton, "Community at the Extremes: The Death Metal Underground as Being-in-Common," 349.

With reference to broadly Deleuzian "new materialisms," Netherton and his co-author Nathan Snaza plead for the "vitality" of matter and conceiving media like the circulating tapes as participants in the underground—as a level network of agents, human and non-human.[37] In practice, continuity with communications-focused approaches that treat media as neutral containers for information is often preserved.[38] Netherton and Snaza are right to highlight tape degradation—both over time and between generations of copies—and the slowness of shipping or using tapes as a medium. But this does not make tapes agents, for the network is tilted towards those who can desire, for it is not just what analog media can and cannot do that makes the material difference—it's also what desiring subjects want them to do.

Before I add genre to this initial exposition of Lacanian desire and the materiality of media, a brief recap. Where desire is at all, desire is about *deferred* satisfaction. The elusiveness of metal-becoming-extreme's missives on degraded tapes, circulating slowly in an inscrutable network of traders was a means to that deferral, but not a self-sufficient one. This materiality becomes productive only when plugged into pre-existing symbolic structures, even if it never assimilates into them. The need to have the unfamiliar, extreme sounds to *not* be about oneself—that is, to disavow identification—did not emanate from analog media but was imposed by such a symbolic structure. Generic norms inherited from prior metal music which, uneasily transposed onto the tape-trading-underground, fueled metal-becoming-extreme's escalating repetitions.

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[37] Snaza and Netherton, 350. This strain of theorizing following Deleuze—which denies preferential agency to subjects, whatever a subject may be—has been called "democratic materialism" by Slavoj Žižek, not least because it fails to account for the dictatorial demands of desire—and thus, for all of its appeals to vitality, fails to account for how desire shapes materiality: we can't help but need things, and this matters. Žižek, *Absolute Recoil: Towards a New Foundation of Dialectical Materialism*, 8, 12.

[38] Notably, Netherton's perspective evolved from this approach, where the bridging of distance and time is paramount—not the addition of the medium. In an earlier version of the above-cited article, he interprets media "as the circulatory networks and containers through which dispersed music scenes are reified across space and time." Netherton, "Extremity Reframed: Exhuming Death Metal's Analog Origins," 310.

Genre as real/symbolic repetition

The previous section introduced repetition within metal-becoming-extreme in two guises: first, the tape-trading underground and its tools as a means of reproducing records and their framings; second, the desire to recapture the initial exposure to those records by hunting down more and more extreme iterations of them. When I introduced metal-becoming-extreme, I did so to remain agnostic about clear subgeneric distinctions—but genre was crucial for the process at a high level. Else it would not be *metal*-becoming-extreme but *music-becoming-extreme*. In its symbolic dimension, genre supplied the mandate that heavy metal *ought* to be heavy, whatever that may mean.

With the historical background in place, I will further specify this objective-subjective repetition by relating it to recent attempts to theorize genre in metal and beyond. To overcome rigid Aristotelian notions of genre, many contemporary approaches to genre regard it as an effect of repetition or repeatability. Recall that Weinstein considers extreme metal a fundamentalist repetition of earlier heavy metal that rejected a perceived corruption. While such self-other demarcations— imaginary (dis-)identifications—play an important stabilizing role, I make the case that we can understand metal-becoming-extreme as a different process of iteration. Its timbres and tempos can be understood as temporal shifts in sonic inscriptions that are then re-integrated into the symbolic demands of metal. By reviewing notions of genre as repetition and its prior application to metal-becoming-extreme, I prepare my close reading of Rok's account of discovering Venom—before he ever heard them.

Repetition of what, by whom?

Repetition is a central moment in contemporary theories of genre. Conceived as citationality or iterability, such repetition entails that any particular element associated with a genre is repeatable in

other contexts. This is what Derrida has in mind when he writes: "Every text participates in one or several genres, there is no genreless text; there is always a genre and genres, yet such participation never amounts to belonging."[39] The touted advantage of citationality in conceptualizing genre is that it avoids essentialism. Rather than defining a genre by necessary and sufficient conditions in an Aristotelian fashion, citationality locates it in its difference from other genres or texts. For David Brackett, the idea of citationality helps explain how genres form and stabilize since "it is a condition of the legibility of a text that a listener can place in the context of a genre […] For this to occur, texts must cite or refer to generic conventions that predate them."[40] In current academic usage, "text" and "legibility" are, as footnotes and hedgings make clear, inclusive of media objects that are not texts in a symbolic language. But can alphabetized writing be equated so easily with sonic inscriptions? Citing a line from a poem is different from imitating a sound. But technological conditions of repeatability are often neglected in the quest to leave behind outmoded notions of genre.

Beyond repetition and citationality, genre is often approached by the *via negativa*, with scholars encircling the concept through reminders of what it is not. Implicitly, they argue with how genre is used in vernacular discourse. One of the most common scholarly gestures for introducing genre is acknowledging how hard it is to theorize.[41] Next, one might remind one's reader what genre is not—

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[39] Derrida, "The Law of Genre," 65.

[40] Brackett, *Categorizing Sound: Genre and Twentieth-Century Popular Music*, 23. Brackett expands on the notion of citationality using the works of Russian literary theorist Mikhail Bakhtin, arguing that what is and is not repeated in music has a social resonance beyond the brute fact of repetition pointed out by Derrida. But this requires that music be capable of representing evaluative judgments that I don't think it can. Ever the materialist, Bathkin, ever the materialist, understood the assimilation of the utterances of others as an assimilation of their evaluative judgments about the world. Compare Bakhtin, *Speech Genres and Other Late Essays*, 89–93. Dietmar Elflein's attempt to support a language analogy with an appeal to timbre is similarly precarious: I can choose how to relate to the judgments of others, provided I am aware of them. But "choosing" a timbre requires access to specific technologies. Elflein, *Schwermetallanalysen. Die Musikalische Sprache des Heavy Metal*, 26.

[41] I will give just three. According to Toynbee, genre "poses a conundrum" for theorists and musicians alike. Toynbee, *Making Popular Music: Musicians, Creativity and Institutions*, 106. Fabian Holt remarks that "it is more difficult to establish useful genre theories for music than for other art forms." Holt, *Genre in Popular Music*, 4. Regarding the difficulty of writing on genre, Brackett remarks that "[c]ontradiction and inconsistency need not signal the undesirability

genre is not an Aristotelian category, a class of objects defined by shared traits.[42] As the last customary word of caution, since Aristotle classifies poetry much like he classifies organisms, genre is introduced with reminders that expressive culture does not follow organic models of evolution.[43] All this caution notwithstanding, the conceptions of genre discouraged in recent scholarship continue to hold sway. In and outside the academy, using genre is more straightforward than contemplating what it is, to evoke a commonplace of the philosophy of language after Wittgenstein.

Though shunned in the academy, in the wild world of the vernacular, such essentialist notions of genre are common. While these may be theoretically untenable, this does not make them any less practically effective. To give just three examples, statements like "if it has Satanic lyrics, it's black metal," "grindcore is dead," or "death metal evolved from thrash metal" will not raise eyebrows among skilled participants in its discourse. Merely pointing out that these statements are reductive biological metaphors is insufficient to dispel their power. As judgments articulated in speech, these utterances perform connections. As Eric Drott writes, "[…] genre is not so much a group as a grouping, the gerund ending calling attention to the fact that it is something that must be continually produced and reproduced."[44] This repeated act of grouping and re-grouping, of judging this to belong with that, is

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of a critical enterprise." I agree. Brackett, *Categorizing Sound: Genre and Twentieth-Century Popular Music*, 3.

[42] The challenge to the trait-based approaches initially came from two different fields: the diverse field of cultural theory later termed post-structuralism, which radicalized Saussurean anti-essentialism, and cognitive science, which developed a new paradigm of categorization based on prototypes. Fabbri explicitly set out "to criticize the widespread influence of Aristotelian and positivist traditions whose recipients tend to see in genres archetypes existing outside of time and culture". Fabbri, "What Kind of Music?," 136. This formulation continues to resonate. Drott, for example, notes that "[t]he tendency to view genre as a set of rigid, taxonomic schemata standing above and outside individual texts, imposing certain strictures upon them, has done much to discredit the notion in both theory and practice." Drott, "The End(s) of Genre," 8.

[43] At the end of the nineteenth century, Ferdinand Brunetière put the Aristotelian notion of genre as taxonomy on updated Darwinian foundations, replacing its outmoded teleology with an updated biological analogy, oft repeated since then. Altman, *Film/Genre*, 6. Such naturalist bias of yesteryear's study of culture is, of course, an easy target. In his attempt to dispel biologist understandings of culture, Fabian Holt is perhaps a bit too harsh on Darwin. Holt, *Genre in Popular Music*, 13.

[44] "A genre, by this account, is not to be construed as a stable class of objects, defined by possession of some discrete set of fixed characteristics. Rather, it is to be understood as a dynamic ensemble of correlations, linking together a

what introduces a dynamic slant into Drott's otherwise inertly level listing of the things that a genre includes—even if this gap for subjectivity runs counter to the Deleuzian notion of "assemblage" which Drott evokes.[45] However, this repetition of generic groupings is not guaranteed—it requires a more reliable anchor than something as unobservable as a judgment.

Thoughts and speech may be fleeting, but groupings and genealogies can become durable when given material form. The curatorial work of fanzines, compilation albums, and music festivals perform generic groupings and judgments of belonging, while shout-outs to formative influences in album notes, coffee-table histories, or various genealogical trees of metal music materialize synchronic and diachronic connections.[46] These artifacts and events become a repository for making further judgments, which are scrutinized by other actors in the scene. Social sanction is another means of promoting the repetition of one judgment over other possible judgments. In other words, a genre's material archive is at the same time a repository for the laws that govern the genre. Etymologically, the word "archive" preserves the duality of law. The Greek *arkhé* can connote both mundane law, as commands that are issued, and the laws governing the cosmos as its first principles.[47]

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variety of material, institutional, social, and symbolic resources: repertories, performance practices, distinctive formal and stylistic traits, aesthetic discourses, forms of self-presentation, institutions, specific modes of technological mediation, social identities, and so forth. These correlations in turn give rise to an array of assumptions, behaviors, and competences, which taken together orient the (individual) actions and (social) interactions. […] Genres, in other words, result from acts of assemblage, acts performed by specific agents in specific social and institutional settings." Drott, "The End(s) of Genre," 9–10.

[45] Conceiving of assemblages as the results of deliberate assembly undermines the anti-subjectivism of Deleuze and Guattari's theoretical project. Kant's transcendental idealism saved the rationalist metaphysical categories (above all identity and its correlate, negation) by removing them from the empirical world, placing them in the a priori unity of apperception. When Deleuze characterizes his project as transcendental empiricism, he concurs with Kant's point that identity is not an empirical category—but unlike Kant, he sides with Hume and excludes identity and subjectivity altogether. Drott, 10. For the relationship between Deleuze, Kant, and Hume's empiricism, see Bell, "Transcendental Empiricism? Deleuze's Reading of Hume."

[46] These genealogies are the starting point for Erik Smialek's inquiry into genre in extreme metal. Ultimately, he discards the logic of repetition and iteration implied by genealogical trees in favor of a self-Other, center-periphery model based on a map of metal. Smialek, "Genre and Expression in Extreme Metal Music, ca. 1990-2015," 34.

[47] Derrida uses this resonance to start the lectures published as *Archive Fever*, to which I return below. Derrida, *Archive Fever: A Freudian Impression*, 1.

But archives find their limits in media ecosystems, the conditions of (re-)producing the archived. Characterizing the minimal conditions of the archive, Derrida writes that "[t]here is no archive without a place of consignation, without a technique of repetition, and without a certain exteriority."[48] The technique of repetition par excellence is writing, which—as we will see Kittler argue below—sustained the illusion that we could internalize writing, even if what was written remained outside of us. Media ecologies, in the plural, offer a less totalizing alternative to Kittler's systems-of-recording (the more literal translation of *Aufschreibesysteme* compared to the more common "discourse networks," which seeks to maintain continuity with Foucault where rupture was intended*).*[49] The "media" in "media ecologies" still implies that writing is now done by machines—and in terms that escape our ability to read it, even if we cannot help but attempt to symbolize it nonetheless. But unlike in Kittler's successive totalities, multiple distinct ecosystems can overlap at the same time. The temporality and materiality of those technologies of repetition deserve our attention—since, with literary criticism being the default archive of genre theory, the specificity of inscribing sound or image with some external technology often slips out of view. I characterize metal-becoming-extreme as dependent on a media ecosystem instead of an archive to emphasize the fragility of this constellation. In other circumstances, its objects would lose their dynamic momentum.

Let me summarize how genre's symbolic dimension structures and requires material repetitions. For better or worse, pseudo-biological notions of taxonomy and genealogy form part of the calculative agency of musicians and taste-makers, forming part of "the insistent, existential reality of the historical orientation of producers by reference to the aesthetic and ethical trajectories or

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[48] Derrida, 11.

[49] Alexander Rehding also points out the liberties taken in the usual translation, rendering it as "writing-down systems." While this correctly atomizes the German compound, "aufschreiben" can also mean "to record"—with the latter interpretation being less biased towards writing in the narrow sense. Rehding et al., "Discrete/Continuous," 223.

coordinates of the genres in which they work, an orientation that enables or affords agency."[50] And while genres are not biological species, *treating them as such in discourse* presupposes a particular ecosystem—institutions and artifacts that carry the symbolic frame for these judgments. But genre is not *just* symbolic since it depends on materiality that exceeds the symbolic frame it carries.

Symbolic frames, missed repetitions

I conceive of metal-becoming-extreme's objects as embedded within a symbolic-cultural frame that is continuous with that of prior metal music. This allows for strategic misreadings that permit for innovation that can be disavowed and credited to external factors. To recall the inaugural quote of this chapter, Fischer recalls that his fidelity to his desire—the more extreme future promised by the sloweddown Venom record—drove a wedge between him and his former bandmates, who shared a similar investment in metal's symbolic order. What he had heard was *more* metal than what they were used to, or, in drastic-physical terms: *heavier*, its sounds distended and down-shifted. Such assimilation into prior symbolic demands would not be possible in other genres.

Reflecting on the origins of the label "heavy metal" and how it contributes to generic in/stability, Deena Weinstein argues that there's a lot in that name. As a signifier, "heavy metal" doesn't merely denote the genre but "serves as a shorthand for [its] rules. […] it calls attention to how to hear the genre" and thus contributes to the instability of the genre.[51] Heavy metal *qua* heavy metal *ought* to be heavy and *ought* to be heard as heavy. This demand, of course, is under-determined—what signifies heaviness may change.[52] But, to anticipate my claims about time axis manipulation as manipulation of the Real, I would not go as far as Ian Reyes and claim that "there is no meta(l)-language," only a

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[50] Born, "The Social and the Aesthetic: For a Post-Bourdieuian Theory of Cultural Production," 22.

[51] Weinstein, "Just So Stories: How Heavy Metal Got Its Name—A Cautionary Tale," 48–49.

[52] At a lower level, this reflects what Lacan would call "the lack in the Other," the gap between pre-existing symbolic orders and experience.

play of audible differences made meaningful by the silencing or forgetting of other differences."[53] Language and the Symbolic are involved, of course. But what shifts is the Real that escapes when the Symbolic is superimposed onto writings *beyond* language's discrete tokens.

The notion of more extreme metal as a repetition of earlier metal is not new. However, it consistently relies on defining that repetition through an outside genre no longer considered sufficiently extreme—the yardstick is symbolic, even if it involves the imaginary dis-identification with some abject but comparable other. Building on Weinstein, Kahn-Harris uses the concept of "transgression" to theorize the testing of limits in the extreme. He argues that the idea of extremity lacks specificity, whereas transgression emphasizes conscious limit-testing.[54] But both are relational concepts: the extreme lies at the threshold; it is as far as one could go—like Venom is for Fischer. Something is extreme compared to other, more moderate cases. Transgression crosses that limit, but, as Tzvetan Todorov reminds us, "transgression requires a law."[55]

What—and whose—law do extreme metal bands transgress? The prevailing scholarly position is: "The law of a metal genre considered abject." As the first scholar to take note of the turn towards what would become extreme metal, Weinstein identified a roster of "fundamentalist" bands that reacted against glam metal's mainstream success and hedonistic image in the early 1980s, likening the austere topics and stripped-down sounds to a Protestant reformation.[56] More recently, Erik Smialek has argued that extreme metal can avoid precise definition because it is defined by abject genres coded as racialized, feminine, and adolescent.[57] No doubt that this logic of othering *stabilized* the later, mature

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[53] Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics," 253. I engage with Reyes' account of black metal's preconditions in greater detail in Chapter 4.

[54] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 29–30.

[55] Todorov, *Genres in Discourse*, 15.

[56] Weinstein, *Heavy Metal: The Music and Its Culture*, 49.

[57] Weinstein, 64.

umbrella of extreme metal. The other has forsaken the received law of heaviness. Thus, he becomes a projective screen in a sibling rivalry that lets one imagine oneself as whole, obedient, and deserving of love. But such submission to the received law is not a productive desire but a circling of the wagons. Metal-becoming-extreme can be understood as a failure to hit the target prescribed by that law, a self-repelling, perpetually rising repetition, where intention passes through apparatuses that re-inscribe it, propelling them higher.

Before I begin my close reading of Rok's account, let me answer the questions posed by this subsection. Genre can be understood as a process of repetition. Based on a symbolic order, actors repeat judgments—categorizations, groupings, and exclusions. But the regularity of this symbolic order—it matters little whether it is called a code, a culture, or a law—is guaranteed by a material substrate that needs to be repeatable in its own right: institutions. Due to metal-becoming-extreme being globally dispersed, these institutions existed through media objects that could find isolated judgment-makers. The order heralded by these objects is incomplete and overlaps with older notions of what metal music should be. But it allowed those who heard its call to attempt to repeat not just judgments but the material form of the objects they received—not to create, but to repeat what the metal symbolic *really* intended.

Fantasizing Venom

Just now, I flew some high-altitude loops around historical constellations of media, desire, and genre. Now, it is time to touch down once more and to dig into the other puzzling autobiographical memory I teased earlier: that of Rok, the vocalist, visual artist, and lyricist of the Australian band Sadistik Exekution (remember the k-stylization—it is part of the brand).[58] Well-connected and respected in

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[58] Like Hellhammer, Sadistik Exekution—founded in 1985 by Rok and Dave Slave—is one of those early

the underground long before having any releases to their name, the band self-promoted relentlessly. One trick was to stage a mock fight at other bands' concerts, only for the not-quite-so-battered Sadistik Exekution members to get up and push flyers and tapes onto onlookers. Their take on the shock rock heritage earned them minor celebrity status in Australia.[59] As in Fischer's narrative, there is self-stylization in this account. Rok presents himself as he wants to be seen, his ideal ego. Nonetheless, it is the form—the internal logic—of the fantasy that I would like to draw attention to: Rok treats it as commonsense for his audience. In this section, I analyze the instability of records within metal-becoming-extreme using Lacan's concept of fantasy, which I use to mediate between genre's subjective and objective dimensions—and how the latter is used to justify the escalations of metal-becoming-extreme.

Putting records to work in the Symbolic

Biographical memory is key to locating oneself in the Symbolic. Long before the recent glut of coffee table books, extensive band biographies were a staple visual-textual genre in the metal fanzine underground: not least because they let fans and musicians locate otherwise free-floating records in a larger historical continuity. The Rok/Sadistik Exekution feature was published in *Slayer Mag* in 1997, spanning no less than six double-column A4 pages adorned by an array of grainy photos and

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products of metal-becoming-extreme that is hard to place within the later system of subgenres. Its line-up and activity were unstable and the peripheral nature of Australia's metal scene made recording and distribution a challenge. Their debut album, *The Magus* was released in 1991 (but recorded in 1988), post-dating the initial glut of canonized death metal and grindcore releases. The band straddles the line between the outrageous and the avant-garde, making categorization inconsistent: in addition to the punk-adjacent grindcore and death metal subgenres, their theatrical performances and *Gesamtkunstwerk* approach (down all "c"s being replaced by "k"s) sees them likened to black metal. The latter perception was reinforced when they picked up by the black-metal-focused French label Osmose Productions—as well as by their close ties to what would become the Norwegian black metal scene.

[59] The band solicited features in the Australian editions of print-publications Penthouse, People, and Picture, as well as on Australian morning and talent-shows—with all of those appearances becoming part of the band's lore as disseminated in interviews with metal fanzines. Korsakov, "Sadistik Exekution." One of the morning show appearances, featuring Rok with face-paint, may be found at: https://www.youtube.com/watch?v=4qoHCIy1zA8

drawings.[60] The formatting of the text conveys both metal's respect for its authors as well as the volatile persona projected by Rok. Band names are printed in **bold**, album names in ***bold italic***, yet the bands and albums that truly excite Rok—**VENOM** and **HELLHAMMER**—are capitalized, italicized, and printed in bold, with indentations and immediate repetitions further amplifying the volume of their transformative impact.[61] But as always, his biography begins before the beginning, with an impersonal lament and evocation of historical context: "Australia is the harshest piece of land on this planet. The birth of death should have taken place here, but it didn't. Death was born in England with a band called **Venom**." This was the universe of meaning he would gain access to—eventually.

But like Hellhammer's Fischer before him, Rok claims he heard the sounds he would try to match with his band *before* he was introduced to metal-becoming-extreme proper. Fantasy precedes desire as a stage precedes a play. In his opening gambit, he emphasizes that he was listening to "real" heavy metal, put in scare quotes: Black Sabbath, Iron Maiden, Motörhead, and Judas Priest. Punk and hard rock were also acceptable, but not metal. Rok describes Deep Purple as "good," even though it is not metal, before reminding himself to repeat some capitalized expletives. Having demonstrated his mastery of the metal symbolic and his power of judgment, Rok moves on to the next argumentative step, making his case that whatever heaviness already existed would not do:

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[60] An influential fanzine created by Jon "Metalion" Kristiansen. First published in 1985, *Slayer Mag* closely followed and facilitated the trajectory of metal-becoming-extreme, featuring up-and-coming death metal bands in the late 1980s, then becoming a platform for the Norwegian black metal scene's reaction against death metal in the early 1990s, before shedding such partisan affiliations in favor of big-tent metal nostalgia. Rok's visual art, which adorns every Sadistik Exekution album, influenced the xeroxed cut-and-paste aesthetic of Slayer Mag. In addition to illustrations, he contributed a barbed logo that would frame the motley collection of typoscript interviews, DYI cartoons, and "all things metal" collages from 1989 onwards. Kristiansen, *METALION: The Slayer Mag Diaries*, 185. According to Metalion, the extended feature on Sadistik Exekution was his way of acknowledging Rok's influence and compensating the band for hosting him during what he acknowledges was a heavily intoxicated trip to Australia in 1996. Kristiansen, 324–25.

[61] It is unclear whether the feature was based on a recording of a phone or in-person conversation (the first page states "THIS IS WHAT ROK TOLD MR. METALION", while the final page of it ends with "As told by Rok to Metalion © SADISTIK SLAYER") or on a letter (still the primary form of communication in the scene at the time). Consequently, the formatting of the text may or may not reflect a written document by Rok, though Metalion's use of caps is far more restrained in other cases.

As much as I like these metal bands, I was thirsty for more 'heaviness.' In other words, more evil, more darkness, more speed, more power, more Satan, more fukking heaviness. I had a record player that had 16 speed and 78 speed. I found that by playing **Motorhead** at 78 speed I could at least hear something faster and **Sabbath** at 16 speed was the ultimate doom.[62]

Fundamentally, the structure of this fantasy is identical to the one outlined at the beginning of this chapter. However, there are two differences: first, the records it operates with *precede* Venom, lying outside of metal-becoming-extreme altogether. And secondly, Rok suggests that he played records faster and much, much slower.[63] Motörhead already had a reputation for breakneck speed: so it should be faster. By comparison, Black Sabbath's music was leaden enough to attract the heavy metal label in the first place: so why not turn it into a bloated funeral dirge? At this point, I will fast-forward past this time axis manipulation, all the way to Rok's discovery of Venom, before rewinding to it.

Clarifying what "fantasy" means helps us re-trace metal-extreme's oscillation between media and meaning. To the Lacanian, fantasy is not something you build around objects. Instead, as Seth Brodsky writes, "it is the fantasy that comes first, as an encircling that constitutes its circled object as enigmatic."[64] It adds that special something to objects, exalting them to make them worthy of our desire: Žižek has likened it to the libidinal equivalent of Kant's transcendental schematism, as "a the mechanism through which empirical objects are included in the network of transcendental categories which determines the way we perceive and conceive them."[65] Lacan gives an even more lucid

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[62] Kristiansen, *METALION: The Slayer Mag Diaries*, 354.

[63] Record players with different rotational speeds were the norm, even if the model mentioned by Rok was slightly more exotic. From the 1960s onwards, three- or four-speed players were introduced to accommodate different phonograph formats. The earliest records were meant to be played back at 78 rpm, but once vinyl superseded shellac as the material of the records, smaller grooves and finer needles allowed slower speeds of 45, 33 1/3, and even 16 2/3 rpm. This, in turn, allowed more sonic inscription to be stored on the medium. However, even with the increased fidelity of the vinyl era, slower rotational speeds translated into reduced fidelity and greater surface noise, consequently, 16 2/3 rpm records were chiefly used for early iterations of audiobooks. However, as Rok suggests, the support for legacy formats could also be exploited to speed up or slow down records at will.

[64] Brodsky, *From 1989, or European Music and the Modernist Unconscious*, 80.

[65] Žižek, *The Sublime Object of Ideology*, 133.

formulation (certainly by his standards), calling fantasy "an image set to work in the signifying structure."[66]

My reading of the outer terms of Lacan's definition of fantasy—"an image" and "the signifying structure"—is straightforward since they correspond to his methodological distinction between the Imaginary and the Symbolic. For image, read sound, touch, or even smell—any continuous data that could excite our senses, or as an afterimage in the imagination, ripe for comparison and ultimately part of the Imaginary. Famously associated with the mirror stage, the Imaginary is the realm of comparison and the small differences that drive the oscillation between love and hate. Seeing ourselves and others, we fashion a self-image, and ideal ego, from a hitherto unruly, partially useful body.[67] The signifying structure is what others would term the "rules" of a genre or the "habitus" of its actors; it is the totality of what subjects, institutions, and language say the genre *is* and should *be*—the Symbolic order, which helps turn those objects into more than they are. With its chains of shifting placeholders, the Symbolic is discrete and discontinuous, while the Imaginary dutifully weaves quasi-organic coherence from the inhospitable piecemeal of the Symbolic. The Imaginary emerges as the domain of metaphorical reasoning and representations reconstructed from *too much* and *too little* information, where we refashion ourselves in on the gaze that emanates from the Symbolic, the desire of the Other. Objects of desire promise that with them, we could fill that space, embody that ideal ego.

The middle term of Lacan's definition of fantasy, the vexingly anonymous but active "set to work," introduces dynamic instability. "Set to work:" by whom or what? By listeners and seers, but also by machines that store, manipulate, and reproduce sounds and sights. Metal-becoming-extreme's symbolic was carried by material objects, whose visual and sonic inscriptions are prone to misspeak

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[66] Lacan, *Écrits. The First Complete Edition in English*, 532.
[67] Fink, *The Lacanian Subject. Between Language and Jouissance*, 85.

the laws they are supposed to carry. At the same time, to parse these objects—to sort signal from noise, meaning from nonsense—the inherited Symbolic needs to be regarded as intact. Which it isn't. This is the subjective-objective resistance at the heart of the fantasy that sustains metal-becoming-extreme—if we want to stick with its Lacanian name, the Real. The concept of the Real can veer dangerously close to a mysterious sublime, the absolute bugbear lurking beyond the veneer of respectable facades and words. Some of Lacan's formulations suggest as much, characterizing it as "this something faced with which all words cease, and all categories fail, the object of anxiety par excellence."[68] It is both too much and nothing at all, as it escapes attempts to pin it down.

Before I return to Rok, I want to hold onto the thought that the Real is not the world as it is without us; rather, it is constituted by what we want out of objects—like the records of metal-becoming extreme. The Real's reality is not that of the thing, *das Ding*, but the reality of *der Gegenstand* (lit. German: the-standing-against)—that which resists our attempts to grasp it. We want something from the world that it cannot give us: something that would stop our wanting while letting us want more. As Brodsky succinctly puts it, this lack in the subject renders the Real unstable: "[…] if stones are not subjects, it's not just because they don't possess consciousness, don't 'know themselves,' but also because they are fully present, and lack for nothing."[69] In so far as the objects of metal-becoming extreme are unstable, then it is because they have to guarantee both Symbolic identity *and* satisfy an Imaginary that goes beyond it, since as an agency, that Imaginary itself is split between inside and outside, a body and a machine that hears the image of the future.

Recoding Venom's noise as signal

Not all objects circulating in metal-becoming-extreme were equally capable of transmitting the

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[68] Lacan, *The Ego in Freud's Theory and in the Technique of Psychoanalysis, 1954-1955*, 164.
[69] Brodsky, *From 1989, or European Music and the Modernist Unconscious*, 74.

Symbolic: some were more ontologically stable. Like many others, Rok was introduced to Venom by a bootleg tape he received from a friend, which gave a more durable shape to the phantoms of speed and heaviness heard on the record player. Isolated as he was in the Australian bush, Rok recalls he "didn't have a clue as to how I could find something heavier, or even if it existed."[70] Something heavier was *possible,* though, as the record player had shown. At last, a friend told him there was "**VENOM!**" After a week-long wait, Rok received a tape containing Venom's "*WELCOME TO HELL*" and some **Slayer**, which excited him less (and did not warrant capitalization). But, due to its uncertain providence and dearth of framing imagery and text, the tape's ontological status was more problematic than that of an "authorized" copy with a firmer footing in the Symbolic. The underground and its tape-based economy still aspired to the "full-fat package" of commercial releases, with the packaging itself being the added value. Rok thus traveled to the record store "Utopia" in Sydney, but he was interested in it as a purveyor of metal in general. In his words, he was on "a mission to find more of this Venom stuff," in a form that could vouch for the authenticity of what he heard and now desired.

Rok's memory of finally getting hold of a coveted Venom LP is dominated by him scrutinizing its Symbolic integrity. Holding and be-holding the packaging of Venom's sophomore album *Black Metal* (their debut *Welcome to Hell* was sold out), Rok recounts his gaze traveling from one occult sight to the next—until the imagined wholeness is threatened by a photo of a guitarist on a motorbike. At this point, though, the means of producing the desired sound slip into focus:

> A black album cover with a silver head of Satan called *Black metal*. I turn it over and was overjoyed to see side black and side metal instead of the usual side one and two. The song titles were just as impressive. *Sacrifice*, *Countess Bathory*, *Black Metal*. Then there were three pictures

[70] Kristiansen, *METALION: The Slayer Mag Diaries*, 354.

of three maniacs with three mental names. The one on the Honda though looked a bit out of place, but what the heck, there were heaps of speakers behind him anyways. [71]

While the other band members are depicted in faux-medieval gear and shrouded in murky candlelight, as seen in Example 1, the once-futuristic Honda vehicle (red, blue, white, and chunky: like the contemporaneous RX-78-2 powered armor suits from the anime *Mobile Suit Gundam)*[72] breaks the veil of fantasy. Eventually, Rok decides that the noise of this image does not corrupt the message that he has received from the Symbolic. By subordinating the out-of-place technology to the signifier of the technological source of the sound, the structure remains intact. His entry into Venom's sound, now vouched for by the material form of this record, parallels this assimilation of senseless noise into meaning.

Since it could be integrated into the Symbolic, for Rok, the noise of Venom turns into a meaningful signal. Venom's grating intros drilled themselves into ears, becoming a calling card of sorts. Waksman introduces Venom with a vivid description of *Black Metal*'s opening moments, where "[t]he first sound you hear is a shrill midrange buzz."[73] Or, as one of Kahn-Harris' interviewees put it: "Chhhhhhhhhh." After waiting out this grating sound, a recognizable riff emerges, albeit etched into wooden-sounding low-budget production.[74] Rok likewise recalls struggling to separate signal from noise, suspecting that the latter (no doubt also present in the tape he received) was a mere accident of the analog medium: "At first I thought there was something wrong with the needle, maybe too much dust so I cleaned the needle and put it back on." But once the record—in all its commercial, fully-

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[71] Kristiansen, 354.

[72] The affection between European extreme metal and Japan has always been mutual, with the island being one of the earliest adopters outside of it. Already in 1982, Venom was aware of this: the back cover of all LP editions of *Black Metal* includes a Katakana spelling of the band name and title.

[73] Waksman, *This Ain't the Summer of Love: Conflict and Crossover in Heavy Metal and Punk*, 182.

[74] The noisiness beyond the introduction was, of course, part accident, part necessity: Venom's debut was a collection of demos recorded in just 3 days, which Neat decided to release. Welcome to Hell's success established the rough-hewn formula; *Black Metal* was recorded in six days.

illustrated LP-ness—allows for repetition of what Rok *thought* was noise, that noise turns into signal: "The same thing again, but this time I realised it was total fukking evil, dirty, bloody kaotik death." Repetition of the sonic inscription, embedded into materially transported Symbolic coordinates, consecrates it as something that *ought* to be repeated. "Bloody kaotik death" is precisely what Rok's band Sadistik Exekution would go on to play.

Example 1. LP back cover of Venom's *Black Metal*. Note the abundant symbolism: a "Side Black" and a "Side Metal," coordinated with background colors, unabashedly transgressive lyrics, band photos with pseudonyms, but also a garish 1980s Honda bike.

The noise Rok consecrated in Venom also echoed his earlier (ab-)use of Motörhead on the record player, the time axis manipulation I skipped past earlier. In his narrative, this guerrilla media practice is not just a stopgap for his desire for a metal that is a linear escalation on all fronts—"more evil, more

darkness, more speed, more power, more Satan, more fukking heaviness"—but it also inscribes the aural space that Venom eventually fills. But we are not dealing with an abstract symbolic mandate here, something as vague as "heavy" (whatever that may mean): the sounds produced by the multi-speed turntable create a concrete imprint. This inscription speaks without having to understand itself. The surface noise is sharpened, pitches shift up, and gestures implied by their sounding traces accelerate. The very laws of acoustics appear to bend. Whatever reverberation was present on the record now fizzles quicker, condensing the perceived space into coffin-like tightness. It promised the shape of what Sadistik Exekution's fitful music would aspire to, but as an already-there, an *a priori*, outside of Rok's whim and will.

The future heard and subsequently desired by Rok was not the "thought from outside"[75] but an image of sound that fit that thought, the re-purposed record filled the Symbolic placeholder. Whether Rok is evaluating Venom's visual presentation, the contribution of noise, or the direction that metal ought to take: one gets the sense that it needs to be over-determined in all its sensory detail. Beheld, not intuited or—forbid the voluntarism—invented. Of course, it is still Rok's imagination that fits these sense data into the Symbolic containers—but taken as a whole; the Imaginary is in *and* outside of him. And, of course, it is impossible to form a band and play something that sounds like a sped-up record—unless one speeds it up. But that is the point: it is unattainable, indifferent to him and his limits; it is what the machine has heard and wants. The inadequacy of the flesh made these sounds enjoyable.

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[75] Foucault and Blanchot, *Foucault / Blanchot: Maurice Blanchot: The Thought from Outside and Michel Foucault as I Imagine Him*.

The time axis sublime

In the previous section, I introduced the concept of time axis manipulation. As I theorize this key prop for metal-becoming extreme's fantasy further, I switch to an external register—something radically other to subjectivity. In Friedrich Kittler's theoretical edifice, time axis manipulation is the active universal that allows him to switch off the human element. It moves perception and reaction into a timescale inaccessible to our corporeality. While we need not draw the same conclusions as Kittler, the specter of human inadequacy vis-a-vis the proper time of the machine is what supports metal-becoming-extreme's fantasy, as an imaginary comparison of body against not-body, where the limits of the former are the source of enjoyment.

Historical possibility and unreachable goals

As a technological possibility, the manipulation of real time described by Rok has existed since the dawn of the phonograph. The device's ability to write language and music into matter, without having to understand it, had far-reaching consequences. Alexander Rehding has argued that the very concept of non-Western music depended on such writing outside of the Symbolic.[76] Just a decade and a half into the age of the commercial capture of sound, in 1905, Erich von Hornbostel exalted the phonograph's ability to pin down Europe's sonic others. With its help, he could stretch and condense sounds, allowing them to be translated into Western symbolic notation. Records, Hornbostel noted, "[…] can be played at faster and slower speeds, allowing us to listen to musical pieces whose original speed was too fast at a more settled pace, and accordingly transposed, in order to analyze them."[77] For

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[76] Rehding, "Wax Cylinder Revolutions," 150. The implications of such writing beyond understanding have been explored at length: Lisa Gitelman has explored the phonograph's repercussion for writing as a cultural technique, while Jonathan Sterne expands on the technological transformation of aurality. Gitelman, *Scripts, Grooves, and Writing Machines: Representing Technology in the Edison Era*. Sterne, *The Audible Past: Cultural Origins of Sound Reproduction*.

[77] Abraham and von Hornbostel, *Phonographierte indische Melodien*, 229.

Hornbostel, this was only an intermediate step towards reading this music into the Symbolic order—notation. Where the sounding writing did not fit, it was rectified per the Symbolic's intentions and, once so pruned, shelved in the Berliner Phonogramm-Archiv. The ephemeral leftovers of this extraction, the slowed-down or sped-up playbacks, vanished as all other sounds had before the phonograph was invented. There was no purpose to repeating them.

But embedded into the metal Symbolic, the sounds of time axis manipulation could be heard as meaningful, as meaning-fuller than the regular speed playback of the re-purposed records. In short, as sounds that *should* be repeated. While this is also true in other genres of music, metal was a special case. The contemporaneous flowering of turntable- and sample-based music, such as hip-hop, Chicago house, or Detroit techno made extensive use of time axis manipulation and could straightforwardly re-use slowed-down or sped-up sounds in live performance or on new recordings. But this straightforward incorporation was blocked for metal-becoming-extreme, where repetition meant it had to be repeated in performance, by a band of one's own, using bodies and instruments.[78] But the imaginary point of comparison is radically indifferent to the limits of such re-performance. It is an unreachable goal, a call to infinite striving—could there be anything more metal?

The drive towards quantitative escalation—faster, faster, faster—was one of the prime vectors of development in metal-becoming-extreme in the 1980s, as Kahn-Harris has observed.[79] Often, this kind of straightforward, engineering-like goal-setting is the complete artistic vision a band will express when asked how they could improve. For example, when pressed on how their next album will be different, German band Kreator answer that they want to get faster. The interviewer points out that eventually, they will run into limits—which Kreator handwaves, gesturing to another band that just

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[78] I explore the effects of the inherited bias against outsourcing physical labor to machines in Chapter 2.
[79] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 33.

kept getting faster:

> Q: Did you say getting faster means getting better?
> A: Better for me. […] I think the first LP is not fast enough.
> Q: But with the third record it will come to an end. Then there will be no chance of getting faster.
> A: No, but take Slayer. Their first LP was damn good. But their second LP is 100% better, and we'll try to do it like Slayer[80]

Once Rok had formed Sadistik Exekution, the band set their sights in the same direction, armed with even more limited resources than their continental European peers. Rok credits drummer Claws Mayhem with pushing the band towards a more physically demanding style of songwriting. But once more it is the record player that paints the shape of the desired object in vivid detail, giving the band shared, audible orientation:

> […] Songs like Venom's Poisen [sic] were speeded [sic] up as fast as we could play them. […] He wanted everything to be black [sic] than darkness, faster than light, and the music to be very technical. When he first heard Sodom he became obsessed by their drummer, Witch Hunter, and would play In the Sign of Evil [a full-length, i.e. 33 rpm, LP] on 45 speed. That still wasn't fast enough for him.[81]

According to Rok, the band would convene to rehearse new riffs by Claws Mayhem, attempting to speed them up as fast as they could play them—only to receive a call that these riffs had been scrapped in favor of even more demanding ones. The archetype of this creativity is engineering, not expression. This kind of calculated—even calculable, as in faster equals heavier equals better—goal setting fits negative stereotypes of metal as a puerile power fantasy. But this misrecognizes the exteriority of metal's desire, which is a symptom of needing music to be about anything but oneself, where even the

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[80] My translation. Original Norwegian: "Q- Sa at dere blir raskere betyr at dere blir bedre? A- Bedre for meg. For gruppa vil det si at vi skal bi hardere, raskere og bedre. Jeg synest at den forste lp en ikke er rask nok. Q- Men med den tredje lp en vil dere komme til et sluttpunkt. Da er det ikke noen sjanse for a bli raskere. A- Nei, men ta f.eks. Slayer. Deres forste lp var jaevlig bra. Men deres andre lp'en er 100% bedre, vi vil prove a gjore det som Slayer." Kristiansen, *METALION: The Slayer Mag Diaries*, 67.

[81] Kristiansen, 355. Playing covers and speeding them up as much as possible is a distributed, over-and-over-again beginning of metal-becoming-extreme, covered in more detail below.

imagination of its future exists out there, objectively.

Measuring (up) to media

The infinite goal, rendered in phantasmagoric detail by the record player, disempowers the desiring subject in the face of its object. In enjoying its human inadequacy, metal-becoming-extreme's fantasy begins to resemble Kittler's quest to exorcise the human from the humanities, another fantasy of disempowerment. What was Kittler's *Geist*-buster of choice? Time axis manipulation, arguably *the* principle that makes a medium a medium.

Arguably, because Kittler's concept of time axis manipulation was meant to dethrone that other grand theory of media—Marshall McLuhan's, who centered on media as an extension of the human body. McLuhan directed attention towards the form of media, arguing that it was not the content but the technical properties of media that shaped human life—as extensions of the human body and its senses, which were "self-amputated" once media augmented them.[82] Kittler, by contrast, set out to build circuits that excluded the human altogether. His insight was that technical media allowed for ways of selectively storing and manipulating data inaccessible and incommensurate with our senses. Initially, the gap between symbolic and analog storage was enough to satisfy his anti-humanism. But with the advent of the digital—capable of inscribing wholly convincing sounds and images without origins—a new synthesis was required, shifting Kittler's focus to time and how it is stored and manipulated.

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[82] McLuhan, *Understanding Media: The Extensions of Man*, 45. McLuhan's view has been much contested. A more hedged alternative to the amputation-thesis may be found in the work of Derrida pupil Bernard Stiegler, who, building on Derrida and Hegel, posits that by creating tools (including media), humans exteriorize their memory and knowledge, passing it on through time. In a study on how such distributed, embodied cognition is active in music-making, Jonathan De Souza points out the Heideggerian undercurrent of *Geworfenheit*, thrown-into-the-world-ness, here: Media and tools are spatially outside of us, yet they're also already-there when we find them. De Souza, *Music at Hand: Instruments, Bodies, and Cognition*, 26.

As Sybille Krämer has pointed out, Kittler's synthesis of Lacanian psychoanalysis and Claude Shannon's communications theory is held together by time axis manipulation. Shannon's mathematical theory of communication eschews the dimension of meaning. Instead, it quantifies the ratio between signal and noise in a communication channel. In this model, the Real itself—formerly what escaped symbolization and imagination—becomes a code that can be calculated and manipulated, if only by machines. The distinguishing mark of analog and digital media is that they can store real-time, including "those processes that cannot be fixed by syntactical structures and are thus not irreversible, but rather contingent, chaotic, and singular."[83] Ultimately, for Kittler, the exclusion of the human aims at a dis-spirited Hegelian synthesis, encapsulated in his declaration that "only that which is switchable exists"—where binary code becomes a universal language, albeit at the price of being unspeakable.[84] Less sweepingly, this means that in the digital age, algorithms communicate with algorithms using transmissions that operate on a scale inaccessible to humans. If time axis manipulation is the criterion that makes a medium, the human body is not a medium because it is irreversibly bound to time.[85]

Time, for Kittler, is how humans do not measure up to media. Like metal-becoming-extreme disavows its stake in the sounds it desires, Kittler disavows the standpoint he needs to make his polemic. But this is still a "negative anthropocentrism," as Geoffrey Winthrop-Young notes, for "the human remains the measure of all technical media insofar as the latter are defined by the inability of the former to measure them.[86] But unlike McLuhan's originally whole body, gradually colonized by media, there is no original whole in this time-centric view. Humans are the outside of technical media, with time

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[83] Krämer, "The Cultural Techniques of Time Axis Manipulation: On Friedrich Kittler's Conception of Media," 97.

[84] Kittler, "Real Time Analysis, Time Axis Manipulation," 5.

[85] Krämer, "The Cultural Techniques of Time Axis Manipulation: On Friedrich Kittler's Conception of Media," 107.

[86] Kittler, "Real Time Analysis, Time Axis Manipulation," 3.

separating the two from ever merging. If—unlike Kittler—one occupies the human standpoint, a standpoint that can and must *desire*, technological media point beyond human finitude to unattainable satisfaction. For mortal beings, being in time is irreversible, and yet, media—as if to mock this frailty—store and move time itself. Sound recording's link to the afterlife, to the beyond, was heard all the more acutely when it had just entered culture—a "resonant tomb."[87] This sublimity, the subversion of the very limit of human existence, is what Rok and Fischer enjoy in the impossible-to-match blueprint given to them by the variable-speed record player.

For Kittler and metal-becoming-extreme, media thus stand in for the divine, the negation of human failures. This isomorphism emerges clearly once Kittler's thought is embedded into a Lacanian frame—as opposed to the other way around. Though Lacan toyed with the idea of the Symbolic as the "world of the machine," it is that machine's inability to represent—that is, our desire that its finite set of movable signifiers should represent us—that reproduces the Real.[88] While Kittler keeps Lacan's "methodological" distinction between the Symbolic, the Imaginary, and the Real (which he hints might merely be "a historical effect" of the differentiation of typing, filming, and recording)," he adds a final synthesis foreign to Lacan.[89] Kittler's final gambit (an Absolute Idea that does not need thought) is to identify the former Real, continuous *natura naturata*, with the new Symbolic of the digital, as a *natura naturans*. This active substance processes reality as if it were a readable code. Paralleling Hegel, Kittler's grand synthesis involves moving from an *abstract* Symbolic language into an *infinitely concrete* Symbolic, the computer. This concrete Symbolic is indistinguishable from the Real, which formerly, in its Lacanian guise, had been "the waste or residue that neither the mirror of the imaginary nor the

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[87] Sterne, *The Audible Past: Cultural Origins of Sound Reproduction*, 287. Aleister Crowley even suggested that adepts of magick might learn how to reverse the flow of time to recover the memories of past lives. See the Interlude.

[88] Lacan, *The Ego in Freud's Theory and in the Technique of Psychoanalysis, 1954-1955*.

[89] Kittler, *Gramophone, Film, Typewriter*, 15.

grid of the symbolic can catch: the physiological accidents and stochastic disorder of bodies."[90] In other words, the Real—the Lacanian Real—is also the body as part of inanimate nature, which a subject that needs to live in and through meaning cannot ever fully make its own.

The image that time axis manipulation projects for metal-becoming-extreme is thus one of a body that is not alive, a contorted alter ego with powers far superior to those of the mortal bands seeking to match it. This double becomes a point of comparison because it is *not* treated as an accident in the metal Symbolic, but as an impersonally intended ideal. At the same time, the rules of this order—"you have to use your body to repeat what you heard"—keep its exact repetition beyond reach, reproducing a Real—the missed repetition—that propels desire onward into new extremes. This potential for missed repetitions, embodied in time axis manipulation as a blueprint, extends the tape-trading underground's inscrutable depths ("what else is there?") and distances ("where did it come from, how long will it take?") into the realm of imagining future sounds. This insight can also help us resurrect potentials buried in the loss of the analog past.

Untimely potentials

Time axis manipulation explains the aesthetic potential of Hellhammer's seminal early releases, a number of self-released tape and one 12-inch EP. These artifacts pose a unique problem: stylistically they share almost nothing in common with what is now considered extreme metal, but they are nonetheless credited as a direct influence by extreme metal bands. This hard-to-recapture potential was premised on the fantasy I have been encircling in this chapter, bound to the analog ecosystem. Hellhammer's releases gave otherwise effervescent time axis manipulation a durable, distributable shape. While their final demo included self-quotations slowed down to a demonic dirge, the unusual

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[90] Kittler, 15.

design of their only EP invited faster playback than intended. Subsequent covers by future extreme metal bands would not only replicate these aural images in performance, but also adopt the timbres distended and sharpened by time axis manipulation.

Repeating or exceeding Venom

In my exegesis of Rok discovering Venom, I focused on acceleration—but what of the other option, of slowing things down to a ghastly crawl? If we use time axis manipulation as our imaginary yardstick, this is the path that takes us back to Hellhammer. It is a vehicle that Rok himself remembers taking, for eventually, his friend promised him something heavier than Venom. After the inevitable wait, they put the tape into their car's stereo. Rok struggles to find superlatives to capture the experience, with the formatting's excitement reaching a new peak amplitude, as the name of his enjoyment is put on repeat:

> The tape went on again. The intensity of the impact this noise was creating was something words cannot describe. It was bliss. Pure fukking heaviness. The ultimate in mental illness.
> Music to make the world end
> HELLHAMMER
> HELLHAMMER HELLHAMMER HELLHAMMER
> HELLHAMMER HELLHAMMER HELLHAMMER[91]

One way to explain Rok's enthusiasm for Hellhammer would be to analyze it as perverse enjoyment, a "so bad it's good" subjection to displeasure. The contemporary critical reception of Hellhammer and its resonance in later scholarship would seem to support this position. The buddying metal press and more established fanzines panned Hellhammer's music, a position echoed by Ian Reyes, who sums up that: "Hellhammer were mostly known as the worst heavy metal band to ever make a record. Not only are the Hellhammer albums poorly recorded, the songs are extremely basic, repetitive, and badly

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[91] Kristiansen, *METALION: The Slayer Mag Diaries*, 354.

performed—difficult to enjoy even for those who like things in that vein."[92] Ultimately, Reyes contends, the Norwegian black metal of the 1990s would reclaim Hellhammer's "sound of amateurism, incompetence, and failure."[93] But positing Hellhammer as an anomaly, a primordial mistake that only gained interest as an inspiration for deliberate atavism, contradicts the manifest influence they had on their immediate successors in the underground across subgenres.

Nonetheless, until very recently, Thomas Gabriel Fischer rejected his brainchild as a mere repetition of Venom. He illustrates this with a less flattering variant of the time axis manipulation narrative I quoted at the beginning of this chapter. In this 2007 interview, Hellhammer's origins on the record player mark them as inferior to the original, Venom:

> I came home and listened to the Venom single, In League With Satan, and it was the heaviest thing I'd ever heard. I played the 45rpm single at 33rpm on purpose. I wanted it to be heavier! […] That was basically the birth of Hellhammer. We were a Venom clone.[94]

Here, the inspiration found in the slowed-down Venom record is an indictment. Not only was Hellhammer a mere repetition, but like the playback from the slow-spinning 45 rpm single, their sound was slower, less tight, and soaked in reverb—not just a clone, but an epigone. Time axis manipulation was the mechanical explanation for the regression from Venom. This contrasts with Fischer's later telling of the anecdote, where he emphasizes the potential made audible by the record player. In part, this reconciliation with the creation he formerly rejected reflects Fischer's personal healing from personal trauma. On the other hand, the republication of Hellhammer's audio-visual history around 2010 met a demand to make the collective analog past of extreme metal available.

In retrospect, it is Hellhammer's failures that make the band an ideal stand-in for the average

[92] Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics," 249.
[93] Reyes, 240.
[94] Lawson, "My Life Story: Tom G. Warrior of Celtic Frost."

underground band. The instability of their lineup, the shortness of their tenure, and the small number of their releases reflects the career of most metal bands. Just two years after the band's 1982 founding, and having released just three self-published demo cassettes and an EP on the punk label Noise Records, Hellhammer formally disbanded—even if it immediately re-assembled as Celtic Frost, with the same core lineup.[95] The re-branding, according to Fischer, was motivated by the overwhelmingly negative reception Hellhammer had received: in the liner notes to the 1990 CD re-release of their sole LP, *Apocalyptic Raids*, Fischer summarized their legacy as "a curse" that "almost killed all of our work and dreams," a judgment he would not revise until two decades later.[96] But although Hellhammer was panned, this infamy drew attention to their releases—and became part of the band's brand in their promotional material.

Hellhammer's formal professionalism, evident form the first extremely low-budget demo tape *Death Fiend* may have provoked some of the ridicule of their musical production. Their appeal to a larger Symbolic order seemed out of touch with their limited means. Although they were three teenagers operating out of a "bunker," Hellhammer was managed by Prowlin' Death Records. In accordance with the practice of other labels, each demo cassette features a label code: PDR 001, PDR 002, etc. The wealth of information and documentation attempts to match commercially released records and be seen on cassette insert of their second demo, *Triumph of Death*, which is reproduced in Example 2. The line "VENOM are killing music… HELLHAMMER are killing VENOM…" alludes to their negative reviews, but also positions them as *beyond* Venom's extremes. Prowling Death Records, sometimes also Prowling Death Management, also published numerous flyers that updated Hellhammer's letter-writing contacts about their lineup changes, future plans, and available releases,

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[95] Fischer, *Only Death Is Real: An Illustrated History of Hellhammer and Early Celtic Frost, 1981-1985*, 201.
[96] Hellhammer, *Apocalyptic Raids 1990 A.D.* Fischer, *Are You Morbid?: Into the Pandemonium of Celtic Frost*, 73.

including a list of all promotional materials. The company's staff was, of course, identical with that of the band Hellhammer—but while this may have invited ridicule, it also attempted to carve out a Symbolic space for Hellhammer's sounds, to give their audience tools to hear sounds as meaningful that the band itself may well have regarded as hard to accept.[97]
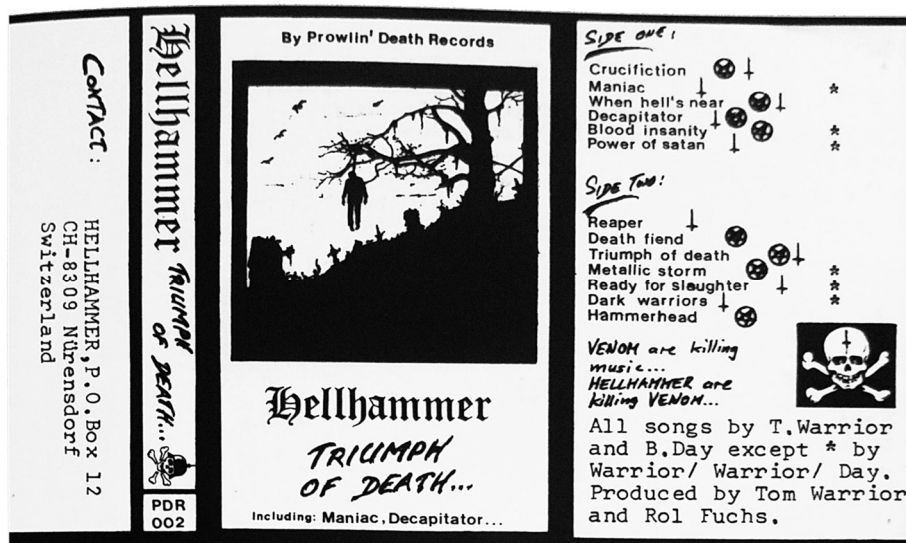
Example 2. Cassette insert for Hellhammer's *Triumph of Death*. Note the label code PDR 002 on the spine, as well as the slogan "VENOM are killing music… HELLHAMMER are killing VENOM…" which project professional aspirations and a transgressive embrace of their negative critical reception.[98]

Time as the link to Hellhammer's future

Due to their marketing acumen, Hellhammer's Symbolic influence was wide-ranging—something that is not readily apparent when it comes to sound. Most famously, they helped name what would become a significant subgenre of extreme metal, death metal, even though its sound would not congeal around the name until the later 1980s (as I show in Chapter 2); Hellhammer is one of the sources for the label

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[97] The puerile camp likely did not help either. In one of the flyers, all three members of Hellhammer list their foremost hobby as sex—in one case, even "all kinds of sexism (I am not gay)", with the lapse in English ability blurting out the unconscious truth of anxious masculinity. Fischer, *Only Death Is Real: An Illustrated History of Hellhammer and Early Celtic Frost, 1981-1985*, 240.

[98] Reproduced from Fischer, 231.

"death metal."[99] After using it as the title for their promotional fanzine, the band also convinced Noise Records to name an eclectic compilation album *Death Metal*—although, except for Hellhammer, none of the other bands was committed to projecting extremity.[100] Scores of bands and musicians would also adopt names inspired by Hellhammer: Norway's Mayhem alone took four pseudonyms from them, whereas the idiosyncratic spelling of French death metal band Massacra betrays the origin of their name in Hellhammer's misspelling of a song title.

On the other hand, aural similarities between Hellhammer's recordings and the music of successors claiming their influence are less apparent. The gritty simplicity shares more with the sounds of the emerging d-beat and crust punk scenes than with was considered heavy metal up to Hellhammer's emergence—or what would be regarded as death metal, or black metal, or grindcore by the early 1990s, for that matter.[101] Despite this, bands that would codify these subgenres credit Hellhammer as a *musical* inspiration. But while these later bands set their sights on breakneck speeds and virtuosity, these attributes are decidedly not present in Hellhammer, who—even on their last release—fall behind Venom in speed and precision.

Parsing Hellhammer's style in current categories is difficult its pragmatic eclecticism resists linear narratives of generational escalation. Venom pioneered the percussive riffing style of thrash metal: power chords accenting the strong beats, followed by the strummed root of that open fifth, as

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[99] Musicians of the Florida death metal bands Death and Massacre recount adopting the label from Hellhammer, as opposed to the other source—the 1984 album *Death Metal* by California thrash metal band Possessed. Netherton, *Extremity Retained: Notes from the Death Metal Underground*.

[100] Fischer, *Are You Morbid?: Into the Pandemonium of Celtic Frost*, 78. Such motley "provisional records" and compilations served an important role in disseminating new sounds in metal. Waksman has pointed out that 1980's *Metal for Muthas* was instrumental for disseminating the NWOBHM. Waksman, *This Ain't the Summer of Love: Conflict and Crossover in Heavy Metal and Punk. Projections of a Stained Mind* on the other hand, a 1991 compilation that featured mostly Scandinavian death metal, also featured the Norwegian black metal track "Freezing Moon"—whose grim simplicity drew attention amidst rather baroque technicality.

[101] The d-beat is a driving drum pattern pioneered by and named after British band Discharge, which involves a standard back beat pattern in the snare over a syncopated kick drum pattern. I detail its uses in grindcore in Chapter 4. Pearson, "Extreme Hardcore Punk and the Analytical Challenges of Rhythm, Riffs, and Timbre in Punk Music."

in the opening riff of "Black Metal." Hellhammer's riffs, on the other hand, rarely project a pulse with the crisp articulation typical in metal. Instead, prominent riffs—like the alternation of two power chords that opens "Messiah"—resemble the slightly off-kilter stream of up- and down-strokes heard on British Crust punk, like Discharge's *Hear Nothing See Nothing Say Nothing*.[102] In some of their more dirge-like tracks, like "Triumph of Death, drawn-out (but not strummed) single-note passages—peppered with bends and the occasional drum fill—suspend metrical drive altogether in favor of quasi-ambient horror juxtaposed with mid-tempo "chugging" that, with some imagination, sounds like a slowed-down version of the proto-thrash riffs described above.

Beyond the guitar riffs so central to metal, Hellhammer's vocals are hoarse but a far cry from the bestial growls of death metal or the tortured shrieks one might hear in later black metal and grindcore. The drum patterns combine moderate backbeat patterns with the occasional fast kick drum roll (eschewing the syncopated d-beat patterns, let alone rapid blast beats), all of it buried in figuratively (and literally) subterranean production. Hellhammer harmonic materials are perhaps the most anomalous. While their power chord streams *mostly* imply minor, chromatic, and Phrygian modes, occasional major scale fragments—like in "Eurynomos"—suspend typical metal modes. In sum, Hellhammer's sound barely resembled what would be codified in the sounds of extreme metal: and yet, as soon as a year after their disbanding, the underground resounded with cover versions of their songs that pushed them beyond the confines under which they were recorded.

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[102] The debt that early underground metal owes to punk was long unacknowledged, mostly due to the Symbolic boundary drawn between metal's investment in fantasy, inimical to punk's realist commitments. For example, in 2000, Jon "Metalion" Kristiansen cites exclusively "metal" inspirations to counter the claim that Hellhammer was a mere Venom clone. Kristiansen, *METALION: The Slayer Mag Diaries*, 440. Once he made his peace with the legacy of Hellhammer, Fischer also openly acknowledge the influence of Discharge. Fischer, *Only Death Is Real: An Illustrated History of Hellhammer and Early Celtic Frost, 1981-1985*, 11. This rapprochement was bilateral: in 2016, a compilation of punk cover versions of Hellhammer songs was released, underscoring the waning of Symbolic boundaries in the face of shared attachment to the analog past. Various/Compilation, *A Fucking Tribute to Hellhammer*.

Cover versions of Hellhammer songs recorded by foundational death metal bands feature higher tempos, more percussive riffs, faster subdivisions in the drum patterns, and, perhaps most recognizably, guttural growls. Some noteworthy early cover versions (which predate Hellhammer's appropriation by black metal's re-founding or the more recent interest in the analog past) include a 1985 cover of "Massacra" by Canadian death metal band Slaughter, a 1986 cover of "Aggressor" by Florida death metal band Massacre, and a 1990 cover of "The Third of the Storms" by New York death metal band Incantation. These live and rehearsal recordings circulated on tapes—re-recordings of Hellhammer, which we might interpret as a revision of a Symbolically important past. But all of these sounds can already be heard in Hellhammer, or rather be made audible with means modeled by Hellhammer's recorded legacy.

Recorded time axis manipulation

While Fischer's passion for slowed-down Venom alienated his former bandmates, it deepened the bonds in Hellhammer and left its mark on their recorded output. To bolster the narrative quoted at the outset of this chapter, Fischer calls on one of his friends as a witness. Urs Sprenger, also known as Steve Warrior, not only shared Fischer's love of punk and metal—and his predilection for wrong-speeding records. After discovering the effects of time axis manipulation while under the influence of marijuana, Sprenger recalls that he "put together [his] own cassette compilation of 45 rpm singles played at 33 rpm."[103] Compared to merely playing back the vinyl, recording the result onto a blank tape gave this temporal reimagination greater fixity. It inched it closer to the ontological status of a record proper. Late in 1983, the band received a conditional offer for a recording contract from Noise Records—if they could produce another demo by the end of the year.

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[103] Fischer, *Only Death Is Real: An Illustrated History of Hellhammer and Early Celtic Frost, 1981-1985*, 35.

In the band's scramble to meet this opportunity, time axis manipulation presented itself as a pragmatic solution and a prophetic inclusion. *Satanic Rites*, Hellhammer's final demo tape, is modeled after a full-length, commercial LP. If the aspirations and constraints of the underground had to be condensed into one artifact, an authentic copy of *Satanic Rites* would hardly be the worst choice. Limited to 200 hand-numbered copies, it is exceedingly rare—and thus often sold in counterfeit versions on eBay, transferred from the 2008 CD release *Demon Entrails* onto blank tape, as shown in the copy obtained by the author in Example 3. Recorded in just 8 hours, in a basement studio on a budget of 600 francs, the 46-minute tape was Hellhammer's most capital-intensive record until then.[104] In addition to ten titled songs spread across two sides, the tape also features an intro and outro that are not listed on the insert—and thus not set apart for the listener.

Example 3. Counterfeit copy of Hellhammer's *Satanic Rites*. The insert is reproduced from online images, while the sound has been transferred from the CD re-release of the demo as given away by the carriers' lack of magnetic or mechanical decay.

Now, for just a moment, imagine yourself as a teenager who is about to hear this tape for the first time

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[104] Fischer, 141.

in the early 1980s. You take the cassette out of its cover and put it into the deck of your stereo. As you peruse the track listing, *something* begins to play. Distorted guitar, tuned impossibly. Drums that thump deep and reverberant enough to suggest they are the size of shipping containers. And then, a voice cuts through the sludge—inhuman, the growl only a behemoth could harbor in its chest. And then, a song fades in—soon, the shout of "Messiah!" reveals what you're listening to *now*. Before, you had been listening to an intro. While introductions (like the ambiance of rain and distant church bells on Black Sabbath's eponymous debut) are a tried-and-true metal tactic for easing the listener out of quotidian life, this intro is different. It is not just horror movie ambiance (though it is also that), but also the ending of another track on the tape, "Triumph of Death," slowed to half speed. The outro is the equally slowed-down beginning of "Buried and Forgotten." On the one hand, the inclusion of these improvised paratexts was a means of deriving content for the full-fat metal LP form on a shoestring budget. But at the same time, the sounds thus produced already are the growls, the down-tuning, the sheer timbral heaviness that would enter the song-space proper in later death metal and grindcore. The tape itself contained the sounds covers would introduce into Hellhammer songs.

And, a twist of irony, a slower re-recording of "Triumph of Death" would also result in Hellhammer's final release, the EP *Apocalyptic Raids*, inviting faster-than-intended playback. Compared to its demo versions, the 1984 re-recording of "Triumph of Death" became even slower. On the second demo of the same name, it was just over five minutes, growing to a stately seven minutes on *Satanic Rites*. On *Apocalyptic Raids*, though, it took up over nine minutes—and thus, together with the five-plus minute "Horus/Aggressor," exceeded the amount of space available on a 12-inch vinyl at 45 rpm. Thus, the shorter "Side One" was pressed at 45 rpm, and the longer "Side Two" at 33 rpm—and labeled according. However, the sheer force of habit—rarely does one have to think or read much

when flipping over a vinyl disk—likely resulted in many unsuspecting listeners being "treated to an even more outrageous musical experience," as Fischer himself notes.[105] The disjointed structure of "Triumph of Death," one of the few Hellhammer songs to not employ a verse-chorus scheme, thus regains some of the tautness that the "riff-salad" compositions of New York death metal acts Incantation or Suffocation would project if only through accident pressed into vinyl.

As aesthetic objects that materialize time axis manipulation, an objective means of imagining and hearing more extreme metal, Hellhammer's releases can thus be understood as a manual for iterating on the flaws of their records. "Can" is the operative word here, since regardless of how death metal bands arrived at their more extreme Hellhammer, it is the shared fantasy that makes this credible at all that deserves our attention. But reducing the continuity between different beads in the chain of metal-becoming-extreme to time axis manipulation goes both ways. It allowed Fischer to reject Hellhammer as a slower, looser Venom clone, but also let Hellhammer roar with the sounds of the future.

Mortal media and genre futures

I will close this imaginative excess—an attempt to resurrect the material imagination of a bygone media ecosystem—by reflecting on the work that time axis manipulation did in the fantasy I have been encircling, why it synthesizes the distance and delay so often remembered as part of desire in the tape-trading underground. In my case studies and theoretical excursions, I suggested that although time axis manipulation has always been a possibility offered by sound recording, metal's Symbolic universe allowed musicians to authenticate the noise created by time axis manipulation as a new signal. Down-tuned rumbles and guttural growls, rapid tempos, and twitch-like turns produced on the record player

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[105] Fischer, 173.

projected a clear path ahead, one that seemed predestined beyond any subjective fancy. Yet the simplicity of this algorithm was also impossible to match with the bodies and tools available to metal-becoming-extreme, which turned this vision of the future into a sublime beyond.

Time axis manipulation integrates of both the creative act (which thus can be disavowed as merely re-creative) and the relationship between the historically sedimented records of metal-becoming-extreme. This is what makes it so attractive, so central to metal-becoming-extreme's Imaginary. The technique covers each of the four temporal orders Georgina Born identifies in the production of art objects, which I have explored in various guises throughout this chapter:

> "[…] first, narrative or diegetic time, what for music has been called its 'inner time'; second, the Husserlian dynamics of retention and protention that map the art corpus or genre as a distributed object; third, and relatedly, the variable temporalities constructed by the object in terms of the movement of repetition and difference, reproduction and invention in genre; and fourth, the temporal ontologies or philosophical constructions of cultural-historical time manifest in notions of 'classicism', 'modernism', 'postmodernism', 'tradition', avant-garde' and so on, concepts that form part of the calculative agency of artists and that supervise the creation of any cultural object […]."[106]

First, the narrative time of Hellhammer's *Satanic Rites* begins once time returns to its original speed after the intro; second, relationships between Venom and Hellhammer, or earlier metal and Venom can be explained as time axis manipulation; third, difference and similarity can be specified with reference to modifications in the direction of greater or lesser speed, down to timbral changes from shout to growl; and fourth, when "faster is better" is established as a goal, even the calculative agency—the goal-setting of artists—collapses into nothing but the mastery over time. This is an oversimplification, a fantasy—which wrings enjoyment out of messy realities. It allows subjects to disavow what they want, and when they pursue it anyway, they will run no risk of satisfying themselves.

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[106] Born, "The Social and the Aesthetic: For a Post-Bourdieuian Theory of Cultural Production," 25–26.

The role media play in repetition within—and beyond—existing genres adds a twist to Steve Neale's theory of genre, itself indebted to Lacan. This requires but a minor revision. Neale writes that "genres exist always in excess of a corpus of works; the fact that genres comprise expectations and audience knowledge as well as films; and the fact that these expectations and the knowledge they entail are public in status."[107] There is more to the excess than just the difference in the works: there are the tools used to produce and re-produce these works. In metal-becoming-extreme's fantasy, it matters how the image projected by time axis manipulation is set to work—not just by whom, but also with what tool: machines and media that are themselves bound to the historical tides of capitalist innovation, even as they promise the ability to manipulate time itself. This introduces a historical instability into the work of the image in metal-becoming-extreme's fantasy that is independent of codified rules or the desire of the listeners—the unreliability, obsolescence, or disappearance of the machines themselves is a distortion. But that distortion makes fantasy useful—it allows us to keep a distance from the object lest we extinguish our desire. With its unconcealed exteriority, the fantasy that props up the desire for more extreme metal thus speaks the truth about desire, circling around an unattainable object.

When we consider genre a set of symbolic conventions, it is portable beyond its original media ecosystem. Its surplus enjoyment may be lost with the original media. As digital refinements and mediations carved out more controllable, portable, and predictable sounds, metal-becoming-extreme became extreme metal. To return from our technological fantasy to the biological metaphors that misrecognize (but not totally miss) its conditions, we might say: that *it is the ecosystem that dies. At the same time, the species—the genre—lives on.* The following chapter skips ahead to the incision made by

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[107] Neale, *Film, Cinema, Genre*, 90.

digital mediations that eventually carved out the drum sound for death metal. While it retains the thinking in time, it considers time as embedded in a different medium—not magnetic tape or grooved vinyl, but the material relations of capitalism de-materializing labor.

CHAPTER 2. THE BLAST BEAT DEVALUED

Man has, as it were, become a kind of prosthetic God.
When he puts on all his auxiliary organs he is truly magnificent; but those organs have not grown on to
him and they still give him much trouble at times.
— Sigmund Freud, Civilization and its Discontents[1]

Is drum replacement cheating?

Among the fans of death metal, the intensity, speed, and complexity of its drumming are widely admired. Together with growled vocals, the blast beat and other machine-gun-like drum techniques set death apart as a subgenre, both in terms of its genesis and enduring sonic identity. But at the same time, there is an awareness (among fans, musicians, and scholars) that on record, these apparently superhuman performances are often exactly that—beyond human capabilities, and the result of extensive technological meditation. Drum replacement (also often referred to as "triggered drums") refers to the practice of using digitally stored samples to replace or reinforce recorded drum performances. This can be done live (using contact microphones to activate samples stored on a so-called drum brain) or in the studio (where mature digital audio workstation software makes surgical copy-paste interventions, all the way to wholesale reconstruction, more convenient than ever before). But whether live or in the studio, mentioning or making visible this prosthesis provokes controversy among death metal fans. The technology that gave death metal its first signature sound also resonates with anxieties around labor-saving in capitalism. It is not the replacement of this or that drum sound that offends—it is the looming obsolescence of human labor.

So: *is drum replacement cheating?* The question is hard to resolve for death metal because like capital, it is a moving contradiction, a question of the past and the present. Consider this polemical

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[1] Freud, *Civilization and Its Discontents*, 90.

exchange in the comment section of a YouTube video, which demonstrates a blast beat drum technique that relies on samples.[2] The technique in question, the gravity blast, uses a snare drum roll technique adapted from jazz to enable faster strikes. The "gravity" in its name is somewhat misleading. Instead, the drummer lowers the stick (parallel to the ground, perhaps this "falling" motion is the actual namesake), hitting the drumhead and rim of the drum. Then, with the rim used as a hinge, the drummer raises the tip of the drumstick and brings it down again for a second hit before returning to the initial position. The motion is finicky and delicate, and its sounds too dynamically uneven and faint to be of any use in the context of extreme metal. But triggered samples allow each stroke, no matter how faint, to produce a powerful sound. The visual and audible feedback is blatantly incongruent. Knowing his audience, the creator of the video is prepared for the controversy (and casual homophobia) that will ensue: "If you think this is gay or fake, then keep it to yourself. Grow up, and ditch the bias against electronics." The comment section does not oblige.

In the controversy surrounding drum replacement, the terms of the debate are those of labor, technology, and value. Like any debate, it is structured by some agreement. Here, this consensus in dissent is a notion of property, a labor theory of value. What creates value is the skill, owned and incorporated by the musician. But this is where the agreement ends. One comment sympathetic to sample use argues that while their use adds power, triggering them on time still takes skill. Implicitly, musicians own the sounds produced—and the skill is rare enough to be valuable. ("If it's cheating, it should be easy […]"). The same comment strengthens its case by drawing a historical analogy to the electric guitar, that foundational technological prosthesis of metal music. ("[…] I guess the electric guitar is 'cheating' since it allows you to do things you can't do on an acoustic one […]"). This apology

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[2] "Gravity Blast Roll; Extreme Metal Technique", YouTube, 28 Oct 2008, accessed October 10, 2021, https://www.youtube.com/watch?v=ir_KZNsTNiQ.

draws push-back from a would-be-Luddite, who contends that even in live performance, samples smuggle in dead labor, which was done elsewhere, long ago—the sound is not owned by the one who operates the machine. Worse still, samples allow for the construction of a "perfect" time beyond human ability.

> […] How is that not cheating? The weight, balance, snap of the wrist, bounce, groove of the hit is a DIFFERENT drummer captured in a DIFFERENT studio by a DIFFERENT producer in a DIFFERENT room with a DIFFERENT snapped to a grid TIME with hits dragged into DIFFERENT perfect time. […]

In this view, drum replacement cuts up and abstracts from the concrete sources of sound—it rationalizes, perfects, and optimizes ruthlessly. Like an echo of the Taylor system, technology still shifts time and space with little regard for human attachments. In this sense, death metal's unease with its tools reflects a general fate in capitalism.

In this chapter, I argue that drum replacement is both essential and intolerable to death metal, a controversy that may be traced back to its initial historical encounter with the technology in 1980s Florida. Drum replacement is essential because it stabilized and realized the extremes death metal aimed for: it allowed death metal to claim ownership of the blast beat as a flagship technique. But it is also intolerable since it upset existing value systems—from the demo form as a vouchsafe for mastery of one's songs, to the demand that extreme sounds be produced by extreme physical effort. The sonic identity of the blast beat and death metal is thus inextricably enmeshed with music's convoluted entry into the digital age—and the labor lost in the process. Indeed, we may even understand the blast beat as a cipher for the riddle of capital's restless abolition of labor. The discourse that regulated its execution created superfluous labor, only to have that superfluous labor collapse into more efficient technology, to the dismay of those who depended on its value.

While blue-collar Luddism permeates the entire rock tradition (as Simon Frith has shown long

ago), death metal's ambivalent relationship with technology is a unique heuristic: rock music did not aim for the super- and in-human, either in meaning or performance.[3] Death metal's pursuit of new sonic extremes, on the other hand, needed technology to transcend human (and even acoustic) limits—and it found them at a particular place and time: Morrisound Studios in Florida's Tampa Bay area, in the late 1980s. Propelled by this new signature sound, death metal briefly attracted the attention of labels and capital—only to suffer once this bubble burst. Understanding this watershed moment—when drum replacement produced death metal—is key to understanding the fault lines in the subgeneric fragmentation of extreme metal in the 1990s.

First, I contextualize drum replacement in the history of recorded sound before making a case for why current scholarship on record production and metal agrees that its drum performances are unrealistic and over-processed—but also fail to account for how closely drum replacement was implicated in the genesis h death metal. Second, I introduce the blast beat—and how its oscillation between abstract ideal and concrete sound can be understood using Marxian categories of capitalist temporality, which let me give a critical account of the attitudes towards technology *and* the musical timing of the technique. Third, I argue that the value of drumming in the Florida death metal scene was based on an attachment to concrete labor, an orientation that emerges most clearly in the single-foot blast: a technique valued not for its sound, but for effort and execution that had to be seen. Yet while this attachment was formed in the original, analog media ecosystem, Morrisound's drum replacement re-determined the blast beat: bringing it closer to its abstract ideal but at the expense of what the scene initially valued about it. Finally, this speculative conclusion—the blast beat came to fit its abstract definition through Morrisound, yet this was also the elimination of concrete labor hitherto

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[3] Frith, "Art versus Technology: The Strange Case of Popular Music."

valued—prepares the technological and analytical case studies of Chapter 3, by reconstructing the system of values that make drum replacement so vexing for the music that needed it most.

Drum replacement and genre

In the bird's-eye view of the musicology of record production, drum replacement appears as the culmination of a long trend towards increased control in the studio. On the other hand, when scholarship on metal acknowledges the highly mediated nature of its drum sound, the origins of this standard are largely unexplored. The practice is either treated as a recent phenomenon of the digital age, or as an unmarked, transparent intervention. This, I argue, conflicts with the growing institutionalized memory of the death metal scene: the introduction of drum replacement by Morrisound Studios, a Florida studio that would become a hub for global death metal, is remembered as an affectively turning point.

Drum replacement in recording history

In the grand narrative of the technological reproduction of sound, drum replacement may be understood as one cog turning in a larger development: from recording acoustic events to re-assembling semblances of them.[4] Only considering drums, the parameters to be controlled are timing, dynamics, timbre, and implied space. Formerly intimately intertwined in a situated physical act of playing the drums, now, they can be manipulated as separate, raw materials—not least due to digital sampling. Simon Zagorski-Thomas's history of the rock drum kit in performance and on record posits that from the 1960s until now, the re-presentation (in an active sense—as something *done* by studio engineers) of drums on records has aimed for greater perceptual separation of individual drums, crisper

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[4] Born, "Recording: From Reproduction to Representation to Remediation."

onsets (by emphasizing transient attacks), and greater consistency in timing and dynamics.[5]

Zagorski-Thomas identifies changing aesthetic attitudes as the motor of this change. First, sound recording subjected the contingencies of human performance to unparalleled scrutiny. Second, the fallibility of the flesh became even more apparent when contrasted with "machine time", or automated, mathematically perfect performances.[6] But there was some feedback, too—human drummers began to play to click tracks in a valiant effort to match the machine rhythms, whereas programmers worked hard to "humanize" the gesture of the machine. For our purposes here—building models of what drives change in recording technology and technique—we may note how thoroughly *aesthetic* Zagorski-Thomas' causes are. Indeed, this primacy of the aesthetic (and thus individual choice and judgment) is characteristic of the musicology of record production, where economic compulsion or technological limits may slip out of focus.[7]

The alternative to this aesthetically centered approach is a history focused on what could be done with technology at the time. Drum replacement's possibility is rooted in technological advances made at the tail end of the 1970s. While drum replacement eventually became an aesthetic choice (at least for some auteur-producers), initially, it served a remedial function. Roger Nichols, nuclear-operator-turned-record-producer, created the first dedicated digital drum replacement hard- and software. Increased memory capacity and computing power had just made this possible, although at a forbidding cost.[8] During the protracted recording sessions for Steely Dan's *Gaucho*, all the tracks laid

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[5] Zagorski-Thomas, "Real and Unreal Performances."

[6] The widespread adoption of drum machines (like the Roland TR-808, which used analog synthesis instead of samples) and the MIDI standards in the 1980s was perhaps the watershed moment for Zagorski-Thomas. See the next section on the blast beat and abstract/concrete time for a more sweeping account of "machine time" that does not take the machine as its creator, but its effect.

[7] Indeed, the small field of the musicology of record production was organized around a volume titled *The Art of Record Production*. Frith and Zagorski-Thomas, *The Art of Record Production an Introductory Reader for a New Academic Field*.

[8] Nichols developed and iterated on other technologies crucial to editing recorded tracks, such as a rubidium

down by the session drummers were unsatisfactory. The band wished for what may still have seemed like a pipe dream back in 1978, "a machine to play the beat we want, with full-frequency drum sounds, and to be able to move the snare drum and kick drum around independently."[9] Nichols assured them it was possible, with time and $150,000. Six weeks later, he returned with "Wendel:" the world's first dedicated digital drum replacement system. Wendel-1 and its descendants were a less invasive iteration on labor- and tape-consuming editing processes, even if its proprietary solution was prohibitively expensive and limited by low storage capacity.[10] Wendel Jr., released in 1984, lowered the price to $1000 but could not store custom samples. At first, drum replacement served to rescue botched takes for those who could afford it. It was not until the advent of new hardware that drum sample use became more integral to crafting recognizable sonic signatures.

The emphatically creative, rather than remedial use of drum replacement—arrived in the 1980s. The decade ushered in a shift away from the dry, analytical recording aesthetic of the preceding decade: a larger-than-life paradigm, made possible by advances in dynamics processing and sampling. Compared to the eclectic, custom-built studio consoles of the past, the SSL consoles' standardized in-line dynamics processing invited a great focus on creative mixes. British recordings turned the ears of the listening public with hitherto unheard-of amounts of electronic processing.[11] A classic example is the dramatic drum break in the middle of Phil Collins's debut single *In the Air Tonight,* which

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clock to synchronize digital recording equipment (a major concern due to, among other things, phase alignment).

[9] Tingen, "Donald Fagen. Recording Morph the Cat." It should be noted that Donald Fagen, in retrospect, developed an aversion to sampling technology and highlights the haptic impoverishment of Nichols' Wendel-1 model: "This was in the days when digital was still very primitive," recalls Fagen. "Roger's machine did not even have any switches, it only had a regular computer keyboard and he had to type all these bytes out, huge lists of numbers, which took him 20 minutes, and at the end he would hit Return, and we heard this one snare a beat. It took so long. It got a little better during The Nightfly, but it was so horrible, I have tried to figure out how to get out of sampling ever since." Drum replacement, it seems, was immediately controversial.

[10] Burgess, *The History of Music Production.*, 107–8.

[11] Zak, *The Poetics of Rock: Cutting Tracks, Making Records*, 181.

established the surreal sound of gated reverb as one of the tropes of the decade.[12]

Sample use became an integral part of rock music—and not just more overtly electronic genres. The huge-but-up-close-and-personal production of Bob Clearmountain was a lodestar for producers in the 1980s. His signature mixes, like Bruce Springsteen's Born in the U.S.A., "suggest music heard live in cavernous spaces, with an almost heliumlike sense of lightness and bounce counterbalanced by drum sounds that by today's standards sound ludicrously pummeling."[13] Relying heavily on sample use, Clearmountain also was one of the first producers famous for his mixes (as opposed to overseeing the whole recording process). If the engineer cannot record new takes, the use of samples becomes critical. Porting this highly processed drum sound into live performance also hastened the development of live sample deployment. Yet despite this more capacious use of drum replacement, it was still beyond the means of smaller studios and artists.

This began to change in the late 1980s which initiated technological and economic developments that take us into the present, the age of the digital audio workstation.[14] I will narrate only the story beats most pertinent to drum replacement, since its status quo is well-represented in the scholarship survey in the next section. First, in the late 1980s, samplers finally became affordable: while the Fairlight CMI used by industry leaders still retailed for $25,000 and more, the Akai S900 put pro-grade samplers into the hands of more independent ventures. With the success of ProTools in the late 1990s, the death knell for tape as a medium resounded: earlier digital recording systems were cumbersome and unreliable, yet once personal computers were capable enough, the non-destructive

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[12] Paul Théberge offers a masterful exploration of the technique (and its place in the history of manufacturing space: reverb). Théberge, "The Sound of Nowhere: Reverb and the Construction of Sonic Space."

[13] Milner, *Perfecting Sound Forever: An Aural History of Recorded Music*, 40%.

[14] For contemporary scholarly accounts of this moment, see Théberge, *Any Sound You Can Imagine: Making Music/Consuming Technology*. Taylor, *Strange Sounds: Music, Technology, & Culture*.

copy-paste paradigms fulfilled the promise of composing with digitized sound itself.[15]

Formerly, there was a mismatch between the media of the sample and the medium it was applied to—now, everything was a sample that could be manipulated. Hitherto independent devices too, were dematerialized into the software. The flip side of this development was that it saved labor at an enormous scale and fragmented the process of producing music. As Timothy Taylor's recent work has shown, capable home recording hardware and the digital audio workstation opened up the industry to neoliberal labor practices—studios employed fewer people, became smaller, and the whole business model moved towards a contingent gig economy.[16] To our catalog of historical schemata, we may thus add another motor of proliferation: the commodification of formerly specialist technology.

Some takeaways. The increased control over drums—and, indeed, sound in general—may be understood as an ongoing loop of capturing, scrutinizing, and perfecting. In this context, drum replacement allowed for more expedient corrections, but also facilitated the creation and use of new sounds. However, the control that drum replacement affords has prerequisites, both economic and technological—not just what is available, but to whom, and at what price.

Genre-specific use and the "heaviness paradox"

After this historical sketch, I now turn to the present, where drum replacement is ubiquitous and the technology enabling it is affordable. However, use cases vary from genre to genre. The relative democratization of technology went hand-in-hand with the relative democratization of know-how. While producers are still likely to regard what they do as an art that cannot be fully taught, the best practices shared on online magazines like *Sound on Sound* or message boards like *Gearspace* document

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[15] Burgess, *The History of Music Production.*, 134–46.
[16] Taylor, *Music and Capitalism: A History of the Present*, 139.

how they anticipate generic listeners and their expectations.[17] Scholarship on the studio production of metal music—often authored by active producers—serves as another source to document the present consolidation of typical uses. Yet such pragmatic guides to practice have an inevitable has a bias for the present, taking the tools and conveniences of the digital audio workstation for granted, implicitly or explicitly.

How drum replacement is used varies in different genres, according to specific expectations. A preference for naturalness and "feel," as well as a preponderance of acoustic instruments limits its use. Agreeing with such conservative interventions, an article in *Sound on Sound* advises a light touch when using samples to correct drum playing mistakes in genres like indie or soul, to not compromise the subtler inflections of dynamics and timing characterizing these kinds of music.[18] By contrast, in contemporary metal music, producers suggest clarity and power trump such transparency. In the same *SoS* article, leading metal producer Andy Sneap suggests that comprehensive sample replacement "is the only way to get the clarity required in the drums to cut through the wall of guitar that is expected these days". This echoes scholar-producer Mark Mynett, who suggests that contemporary metal music "has a greater fundamental requirement for the use of drum samples" compared to genres that may use similar combinations of instruments.[19] Rather than serving as a corrective for flawed performances, producers consider drum replacement an integral means to achieve an aesthetic effect that allows drums and guitars to coexist in a mix that emphasizes overall heaviness.

The contemporary prevalence of drum replacement in metal, then, represents a particular

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[17] *Gearspace* was founded in 2002 as *Gearslutz* and not renamed until 2021, indexing how hostile the field can be to women. A critical examination of gender roles in music production, based on extensive interviews with female studio practitioners, can be found in Reddington, *She's at the Controls: Sound Engineering, Production and Gender Ventriloquism in the 21st Century.*

[18] Dunkley and Houghton, "Replacing and Reinforcing Recorded Drums."

[19] Mynett, "The Distortion Paradox. Analyzing Contemporary Metal Production," 82.

solution to a problem created by its sonic escalation. The pursuit of heaviness can undermine heaviness, a contradiction that Mark Mynett has theorized as the "distortion paradox." His account draws on a psychoacoustic theory of heaviness, grounded in how high levels of distortion mimic our experience as agents living in a world with particular physical properties. As a physical phenomenon, distortion occurs when a sound source is pushed to its limits, like the vocal tract in a scream. Even when it is produced by technological means, distortion evokes such pushing of limits.[20] Additionally, by rendering the frequency content of the input signal more complex, it increases the perceived proximity and sonic weight. This, in turn, contributes to heaviness. Yet high levels of distortion—the wall of guitar invoked above—also tend to mask the definition of the fast and precise rhythmic figures that are equally essential to the intensity of the extreme metal styles that developed in the 1980s, with death metal leading the pack. To summarize, distortion both benefits and undermines heaviness, at least when the latter is conceived as a straightforwardly calculable psychoacoustic effect. For leading producers like Mynett and Sneap, thanks to the convenience of drum editing in the digital audio workstation, the distortion paradox has been conquered—and musicians and listeners are willing to accept technological intervention as a trade-off for this.

This generic expectation preference for overall sonic impact is often cited as a driving force for the prevalence of drum replacement in more extreme styles of metal, both in the present and historically. Sometimes, it takes the characteristic form of a democratic appeal. For example, a guide to best practices in metal production by Mark Mynett states that listeners and musicians alike demand the sounds afforded by sample use and quantization (the practice of correcting timings):

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[20] The emotional valence of distorted timbres has been studied empirically by Zachary Wallmark and his colleagues, explicitly also in listener responses to metal. See Wallmark et al., "Embodied Listening and Timbre: Perceptual, Acoustical, and Neural Correlates."

A majority of listeners want this style of music to present a dense and powerful yet clear sound. The artists usually want the same, as this translates and enhances the best aspects of their performances.[21]

Such a hegemonic production ideal can also be seen in a diachronic perspective, where the anticipated and potential use of music technology puts those involved in the recording process into a sort of arms race, increasing metal's dependence on technology over time.[22] But this perspective doesn't foreground choice and preference (as Mynett's does). Rather, it emphasizes the economic competition among studios and producers: if they cannot achieve the desired results, or cannot deliver them at a competitive cost (that is, a competitive expenditure of time and labor), they risk falling behind in the competition with their peers. The *aesthetic* and *economic* thus emerge as two sides of the same coin, and the implicit tension between pleasure and compulsion raises the question if the latter taints the former.

Another question is how conspicuous digital drum editing is to listeners—and why a genre culture that exults virtuosity would accept what could be seen as performance enhancement. Scholars of metal have offered different hypotheses for harmonizing this apparent tension. Mynett, as quoted above, considers it a transparent intervention tolerated for its benefits. By contrast, Duncan Williams suggests that contemporary editing practices routinely yield "superhuman" drum performances. That these are tolerated implies—at least to him—that metal fans are either "unaware of these processes being used, or that the issue of authenticity is less significant to them than the overall production

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[21] Mynett, *Metal Music Manual*, 21.
[22] A broad, non-subgenre specific study of this sort was conducted by Niall Thomas. Significantly, Thomas' pre-interview research focused on the spatial arrangement of drums, yet, in the course of his interviews, the rising prevalence of drum editing and replacement was emphasized by his interlocutors. One of them remarks that this production ideal has, in turn, edged embodied performance in metal closer to machine time, where young drummers "sound just like the record […] because they don't know it's been edited." Thomas, "The Development of Technology and Its Influence on Recorded Heavy Metal Music 1969 - 2015," 268.

standard and the complexity of performance that such techniques afford the genre."[23] The possibility of general ignorance is also raised by Smialek, who considers the apparent use of digital editing to be controversial. Finally, Zachary Wallmark agrees with Williams that drumming in death metal often sounds inauthentic ("a charnel house of mirrors involving the pervasive use of aural illusions") but offers a different explanation as to why this is tolerated. Since it simulates extreme bodily effort, it functions as a form of ritual purification that asserts control over chaos.[24] Two takeaways. First, the highly mediated nature of drum replacement is widely acknowledged, but its potential for controversy in the present is downplayed with appeals to the popular taste, blissful ignorance, or enjoyment of artificiality. Second, the current ubiquity of drum replacement, intimately tied to current technological and economic conditions, is implicitly projected into the past. The controversy that surrounds drum replacement is intimately tied to how scarce the technology used to be.

Let me summarize the last two subsections, and how they help us understand the pivotal role of Morrisound studios not just for death metal, but for the contemporary production ideal in general. The particular needs of more and more extreme metal, as well as the past scarcity of the technology required to overcome the distortion paradox, set the stage for how the introduction of drum replacement is remembered in death metal's archive. Current sources tend to naturalize the conveniences of the mature digital age. Implicitly, the visual and reversible copy-and-paste paradigm of the digital audio workstation is assumed as the default. Even when older examples are cited, the challenge of drum replacement on analog tape is treated as trivial, even if it once made a difference.[25]

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[23] Williams, "Tracking Timbral Changes in Metal Productions from 1990 to 2013," 44.

[24] Wallmark, "The Sound of Evil: Timbre, Body, and Sacred Violence in Death Metal," 76.

[25] Williams cites an example from 1993, from Carcass's *Heartwork*, focusing on the metaphors used to describe the timbre of the chosen sample. The technical nature of the drum replacement and its historical origins are left unexplored. Produced by Colin Richardson and engineered by Keith Andrews, the album adopts the production aesthetic pioneered by Morrisound and Florida death metal. But this is the propagation of this paradigm—Richardson's earlier productions (like Bolt Thrower's *Realm of Chaos* of 1989, subject of Chapter 4) use conspicuously acoustic drum tracks.

But the present ubiquity of digital editing heightens the historical difference for those who witnessed this analog-digital transition. When death metal was pushing new extremes in the 1980s point, the problem of balancing faster drum playing with more distorted guitars was felt acutely.

How a studio produced death metal

While scholars have recognized Morrisound Studios' importance to death metal, the studio's pioneering drum replacement has been little noted. Yet this implementation, tailored to the needs of a niche genre, set norms and expectations that had an impact far beyond Florida and resonate up to the present. Morrisound established drum replacement as integral to the sound of death metal. As the protagonists of the scene age and consolidate the memory of this analog-digital transition, this pivot point is more keenly remembered. In this section, I argue scholar-fans often gloss over the importance of drum replacement for death metal. This bias may be traced back to a more fundamental conflict between the values of the death metal scene and the technology it needed to constitute itself, a half-repressed that demands attention.

Morrisound Studio as key infrastructure for death metal

Florida death metal, both as a locally and temporally bounded scene, as well as a sound, a subgenre within a subgenre, can be traced back to a prolific recording studio. Since its founding in 1981,[26] Morrisound Studios has recorded music across the spectrum of popular music (from death metal to girl group Destiny's Child, featuring Beyoncé). This eclectic portfolio was made possible by the self-effacing, service-oriented attitude of its engineers. No matter what musicians brought to them, the

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[26] The staff initially consisted of the brothers Jim and Tom Morris, their father Laurel Morris, and the engineer Rick Miller. Engineers Dan Johnson and Scott Burns joined later soon after, with Burns attaining particular fame as a death metal producer. His younger age and close ties first to the punk scene, then to the metal scene, facilitated cooperation with the death metal bands. Yet all engineers took on death metal albums during the crucial period of the late 1980s to early 1990s.

studio's staff wanted to do "a good job."[27] In the realm of metal, the Tampa studio served local not-quite-so-extreme bands like Nasty Savage and Savatage before coming in contact with death metal through the local band Xecutioner (later renamed Obituary). While the scene grew from a small roster of local bands—Obituary, Death, and Morbid Angel—the studio soon attracted a global roster of bands, complicating the strict local boundaries of the scene. For death metal, the Florida scene and Morrisound had global repercussions.

But just how central Morrisound was to the development of death metal in Florida and beyond has been a point of contention. Two distinct viewpoints exist in scholarship, articulated in a Bourdieuan framework focused on social differentiation and competition. In his typology of metal scenes, Kahn-Harris cites the Florida death metal scene as exemplary of the weakness of US metal, a "coexistence of vibrant musical creativity with weak institutional creativity."[28] More recently, Marco Swiniartzki has pushed back against the view that Morrisound was the central infrastructural anchor for Florida death metal. According to Swiniartzki, the studio "strengthened Florida's fame as a death metal hotbed immensely but 'only' worked up the potentials of the scene that already existed."[29] In other words, it was just another regional precondition that facilitated the "straightforward realization" of the developing scene's musical intentions.[30] Instead, Swiniartzki locates the scene's lasting reputation in its strong ties to the local club scene and the favorable press it received from non-metal sources at the time. But this discursively-focused explanation makes his answer to the question "Why Florida?" unconvincing—it wasn't just the most active circuit where bands could distinguish themselves.

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[27] Jim Morris, quoted in Netherton, *Extremity Retained: Notes from the Death Metal Underground*, Location 3047.
[28] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 103–4.
[29] Swiniartzki, "Why Florida?: Regional Conditions and Further Development of the 'Florida Death Metal' Scene and the Local Public Response 1984–1994," 179.
[30] Swiniartzki, 173.

The problems solved by Morrisound were neither straightforward nor easily reconciled with the do-it-yourself values of buddying death metal scene. While the studio has always been prominent in oral histories of death metal, the emphasis in these memories has shifted from the experience of community to the experience with technology. Earlier oral histories, like those of Mudrian and Ekeroth, devote little space to the technical details and innovations of Morrisound. By contrast, Jason Netherton's recent interview collection Extremity Retained contains an entire section dedicated to the memory of the studio experience—and the envies and anxieties it sparked.[31] In particular, the death metal scene remembers the studio for overcoming engineering challenges unique to the analog-digital transition in the 1980s.

The specific challenge solved by Morrisound was coordinating the linear medium of tape with the slow response time of early digital equipment.[32] Lee Harrison, drummer of Florida death metal band Monstrosity, credits Morrisound with being the first to solve this quandary, thus allowing Florida death metal to cross the digital divide early:

> [O]ne of the reasons why death metal sounded so good coming out of Morrisound was that they figured out the latency problem when recording the kick drums. […] They just knew how to properly trigger the kick drums then, when so many other so-called "big" studios were still trying to figure out how death metal drums were supposed to sound.[33]

This technological edge suggests that the unparalleled "transregional pulling effects" of the Florida death metal scene observed by Swiniartzki were not just the effect of a particularly vibrant community of musicians, as he concludes.[34] Instead, for some time, Morrisound was the only pathway to what had

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[31] In addition to reflecting growing technostalgia and "old school" revivals in the wider metal scene, Netherton's greater attention to technical minutiae in his interviews (which, sadly, do not document his questions, as is customary in the journalistic format) stem from his own practical experience as a musician recording death metal. He is a founding member of Misery Index, and a former member of Dying Fetus.]

[32] I detail these studio processes and their sonic signatures in Chapter 3.

[33] Quoted in Netherton, *Extremity Retained: Notes from the Death Metal Underground*, Location 3693.

[34] Swiniartzki, "Why Florida?: Regional Conditions and Further Development of the 'Florida Death Metal' Scene and the Local Public Response 1984–1994," 175.

become *the* death metal sound. Indeed, as I argue at the end of Chapter 3, some bands began to regard this sound as their own—only to discover, with some dismay, that they could not reproduce it in other studios, or under live conditions.

The flip side of this close association was the relative instability of subgenres at the time: since there was no best practice for producing death metal prior to Morrisound, there was no "generic" sound yet. Making drum replacement technically and economically viable gave the studio a unique selling proposition for bands and labels alike: access to the first successful, widely recognized sound of death metal.

The neglect of drum replacement

The neglect of drum replacement's role in the development of death metal stems in part from an undue focus on its guitar sound, which is often taken to constitute the main difference between the earliest production in death metal—Morrisound's—and the sound of Swedish death metal, associated with Sunlight Studios in Stockholm. For Kahn-Harris, the Florida sound, which he credits to Scott Burns, is "clear, compressed, but still heavily distorted." In contrast, the Swedish sound of Tomas Skogsberg features "fuzzier" distortion.[35] Such differences in production reflected global inequalities in access to recording spaces, a fact that strengthened inter-national rivalries and subgeneric formations. Ian Reyes blames the eventual demise of death metal's popularity in the mid-1990s partly on the hegemony of the Morrisound aesthetic, "specifically the combination of exaggerated, muddy bass; tightly focused

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[35] Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 32. In his dissertation (the published chapter omits all mentions of Morrisound), Wallmark paraphrases Kahn-Harris closely, additionally noting the "forwardness" of Burns' production, which he attributes to the use of "digital compression" Wallmark, "Appraising Timbre: Embodiment and Affect at the Threshold of Music and Noise.," 218. To be sure, a standardization in guitar sound is, of course, a major part of these sonic signatures: large Marshall amplifier cabinets at Morrisound, often combined with a RAT distortion pedal; small Peavey cabinets combined with the obligatory HM-2 pedal at Sunlight. The portability of predictable sound afforded by these digital effects pedals should not be underestimated. Compare the discussion of the Sunlight sound in Chapter 3's discussions of alternatives to Morrisound.

drums; prominent vocals; and inhumanly precise performances.[36]" Only one major study of death

metal, Natalie Purcell's, mentions using samples in passing through the shorthand of "triggers."[37] The

focus on guitar and relative imprecision is easily explained by its iconic salience and the difficulty of

discussing studio production and timbre in detail.

But there is another explanation for this relative silence: the same values that make drum

replacement a controversial issue in the scene are reproduced in scholarly accounts, even if those

accounts draw on source material where drum replacement is front and center. Jim Morris, one of

Morrisound's founders, straightforwardly suggests that Morrisound developed drum replacement

solutions because a vast majority of musicians could not perform the most prestigious technique in

death metal (and one that set it apart from prior extreme metal):

> Back in the late 1980s, we eventually developed systems for drum replacement that now look
> archaic. We were more or less using that technology because some drummers would come in
> the studio and be unable to perform their own songs. They were playing like half a song, and
> then they couldn't play anymore. They were playing just beyond their level of competence.
> […] The blast beat especially was a challenge, mostly because they were often just not played
> correctly. It was very difficult, and 90% of the drummers were not doing it correctly.[38]

But even when drum replacement is centered in an interview, scholars that share the values of the death

metal scene often choose to de-emphasize it. The linchpin here is the labor replaced by drum

replacement—and how integral drum replacement was to death metal consolidating its signature

musical techniques and sounds.

In studies that draw on this interview, key parts of the passage quoted are suppressed to either

diminish the importance of Morrisound or to emphasize the independence of death metal musicians.

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[36] Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics," 251.
[37] She also pinpoints the album—Death's *Leprosy*—that initiated the migration to Morrisound. Purcell, *Death Metal: The Passion and Politics of a Subculture*, 25%.
[38] Quoted in Netherton, *Extremity Retained: Notes from the Death Metal Underground*, Location 3095.

Swiniartzki quotes parts of the passage to bolster his contention that Morrisound merely facilitated and that their contributions in no way conflicted with the do-it-yourself values of the scene has been noted above.[39] Snaza and Netherton use a slightly different excerpt to locate the origins of death metal in a "proleptic desire for a (drummer's) body that isn't currently available and experiments with practices that could bring that (inhuman) body into being."[40] But both omit Morris' original framing, choosing to center determination and a "bootstrapping" narrative over the possibility of technological dependence. But I don't mean to unmask or correct these scholars. Instead, I would like to raise the issue of standpoints and how they help us understand the tense constellation of death metal, drumming, and technology.

Before moving on, I want to emphasize the need to hold onto these contradictory perspectives, since this tension makes drum replacement the technology it is for death metal drumming—a vexing, but essential prosthesis. These standpoints, produced by different affective attachments and material dependences, are integral to the constellation I build below—and they show death metal as a heuristic for the character that technology, in general, takes on in capitalism. To understand *why* death metal needed digital interventions to realize its potential, and why this can be hard to acknowledge, we need to understand its most prized drum technique, the blast beat. This technique's split relationship to time and labor will also arm us with the theoretical means of situating the perspectives sketched out so far as immanent to capitalism.

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[39] "They were playing like half a song, and then they couldn't play anymore. They were playing just beyond their level of competence. […] They had the vision in their head and they knew what the music was supposed to be about. […] because death metal, especially when it started, was played not because you thought you were going to get paid; you played it because you had to." Swiniartzki, "Why Florida?: Regional Conditions and Further Development of the 'Florida Death Metal' Scene and the Local Public Response 1984–1994," 173.

[40] "… those guys were playing stuff just beyond their level of musical competence, and that in and of itself is a tribute to how amazing it was and how much they cared about it. They really wanted it to be better than they could really [physically] do." Snaza and Netherton, "Community at the Extremes: The Death Metal Underground as Being-in-Common," 344.

Value in/as time

In this section, I theorize the blast beat as a quantitative and qualitative escalation, a technique that exists in abstract time and is a form of concrete time. This is a more specific instance of the contradiction between ideal and reality examined in Chapter 1. There, time axis manipulation produced concrete ideals. Here, the goal is abstract, but must be attained without breaking the rules of quasi-athletic competition. But this abstract/concrete distinction is also the core contradiction of capitalism, where the compulsion to raise productivity to maintain value turns technology's continual abolition of labor from a blessing into a curse.

History and definition in the blast beat

"Only that which has no history," Nietzsche writes, "is definable." So, to begin, let me give a formal definition of the blast beat, which will be a-historical and false *because* it is formal and abstract. But that's the point—the definition, as that abstract ideal that can be symbolized with natural language (or Western notation) is itself a historical actor, as the possibility of a purified yet elusive perfect blast beat. It is that gap between ideal and reality that made the blast beat the death metal scene's foremost athletic competition, a site where drummers could claim valor.

A definition: *the blast beat is a rapid kick-snare alternation, with either the kick or snare drum hits doubled with a cymbal hit.* The rapidness is essential. Anything below 200 beats per minute would not be considered a blast beat, assuming a beat unit of a quarter note and the kick-snare alternation taking place at the level of the subdivision, as transcribed in Example 4. Such symbolic representation of the blast beat—describing it as an "alternation," or writing it out in notation—suggests an evenness that is far removed from how chaotic the technique could sound in actual performances. However, a higher standard of performance—and studio enhancements like drum replacement—inched the blast

beat's sounding gestalt ever closer to that suggested by its symbolic representations. What began as a

chaotic burst of noise became streams of equally powerful pulses.

Example 4. Variations of the "traditional" blast beat. While different patterns exist, they are all centered around a kick-snare alternation. Without additional drum hits or dynamic accents, the rapid alternation does not imply a metric hierarchy. Adapted from Roddy, *The Evolution of Blast Beats*, 22. Drum legend and tempo markings added.

But, you may ask, aren't those four blast beats transcribed here? Yes and no: there are of course

different blast beats, various patterns that center around high-speed alternations of kick and snare. Or,

sometimes, simultaneous hitting of kick and snare drum.[41] The taxonomy of these variations is

complicated, and the prestige associated with them stratified—as the following section shows. Despite

of this multiplicity of variations, the critical discourse of the scene remains is transfixed on "the" blast

beat, or what makes something a "true" blast beat. The many blast beats imply the one, a fantasy of its

apotheosis—and it is this fantasy of fulfilling its potential that underpins the historical development

of the blast beat, as a sounding fact and a site of distinction. The technique's martial simplicity is what

makes it death metal's Spartan proving ground, even if historical and physical contingencies complicate

it.

After this preliminary definition of the blast beat, I need to touch on who defined it, and

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[41] Pearson has classified these blast beat variants as Alternating Kick Snare (AKS) and Simultaneous Kick Snare (SKS) blast beats, respectively. Roddy—and other death metal drummers—refer to this latter variant as the "hammer" or "hyper" blast. Pearson, "Extreme Hardcore Punk and the Analytical Challenges of Rhythm, Riffs, and Timbre in Punk Music."

when—questions that intersect with ownership and naming, and thus with genre. The genealogy of the blast beat is intertwined with the histories of punk and metal alike. While the Florida death metal claims credit for giving the blast beat its machine-gun-like power and solidity, the punk scene originated its more chaotic, less disciplined initial form. While they might quarrel about other matters, punk and metal sources agree that the origins of the technique are in the punk-adjacent grindcore scene, though who exactly did it first remains a matter of dispute.[42] This initial stirring of the blast beat gained greater circulation through the early commercial releases of British grindcore, such as Napalm Death's *Scum*.[43] Napalm Death's drummer, Mick Harris, is credited for naming both grindcore and the blast beat, which he was introduced to through tapes from US punk bands like D.R.I. and Siege. In his hands (and under his feet), the blast beat was a burst of energy with little concern for the controlled, regular pulse patterns typical in metal.[44] A noisy wash of sound, where the unruliness was the point—not an unwanted byproduct. By abandoning metric exactness and some intelligibility, emerging grindcore bands gained an edge in the race for new sonic extremes.

This complex, genre-crossing history of the blast beat can be unified by understanding the blast beat as a quantitative escalation of prior metal drum idioms. The reason this unifying principle appeals to many in the scene is that it works both on an abstract-formal (we might say "music-

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[42] Such disputes, of course, arise only once the technique catches on and becomes generic. Ekeroth, *Swedish Death Metal*. cites the Swedish punk band Asocial. Roddy, *The Evolution of Blast Beats*. cites grindcore bands Napalm Death, Repulsion, and Extreme Noise Terror. Pearson, "Extreme Hardcore Punk and the Analytical Challenges of Rhythm, Riffs, and Timbre in Punk Music." focuses on the US hardcore outfits Siege, Infest, and Crossed Out.

[43] Which is best understood as having grown from the same punk and metal sources as death metal, as convergent evolution—and not as a "punk-influenced radicalization of death metal", as in Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 3. Historio- and hagiography written along generic boundaries that coalesced only after that narrated history takes place are a persistent issue in metal and punk scholarship, creeping even into essential critical works. Chapter 4 takes this issue up in more detail.

[44] As Pearson, "Extreme Hardcore Punk and the Analytical Challenges of Rhythm, Riffs, and Timbre in Punk Music." notes, lesser dynamic and metrical evenness is still correlated with punk-ness in the 90s extreme hardcore punk bands he studies. His contention that the blast beat in metal is more precise and even because of the use of the double bass kick drum is a claim I contest in the section below—the use of two pedals was shunned during the formative years of death metal.

theoretical") and a concrete-historical level: the blast beat doubles the speed of the kick-snare alternation in the so-called *Slayer* or *skank beat,*[45] which, in turn, has doubled the speed of a simple backbeat pattern, as shown in Example 5. This analogy underpins the developmental narrative in *The Evolution of Blast Beats* by Florida death metal drummer Derek Roddy, which is a history as much as it is a pedagogical manual. It begins with the narrative given in the paragraph above: the blast beat's origins in grindcore are recounted; the Florida scene is credited for making the blast beat "musical" by "giving it a solid time signature" vis-à-vis the unbridled blasting that came before. But the first notated example is not a blast beat. Instead, it is a *skank beat*, explained as a "sped-up" rock beat or "angry polka". Only then is the blast beat introduced and, eventually, individual bands and drummers are credited as the originators of specific variants. From a pedagogical point of view, the organization according to ever-smaller subdivisions anticipates the development of individual drummers, yet also coincides with the development of the blast beat as a whole: ontogeny and phylogeny coincide, at least at this level of quantitative abstraction.
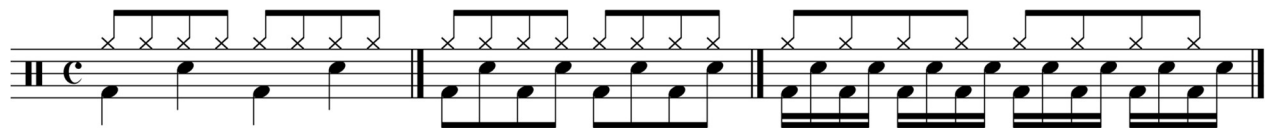
Example 5. Comparison of backbeat, skank/Slayer beat, and blast beat. The blast beat can be (and is) explained as a sped-up version of slower (and historically earlier) kick-snare alternations.

The blast beat can thus be defined by its symbolized, quantitative relationship to other techniques: if it is too slow, it is not a blast beat. What Roddy presents as a pedagogical model can also be observed in the autobiographical narratives of bands. In a textbook example of the faster-is-better iteration we

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[45] Both names point to punk origins. Roddy considers "Slayer" the older nomenclature, after the Bay Area thrash band, which, however, originated in a milieu that wasn't purely metal, but also included punks and skaters—the thrashers. Skanking, for its part, is a dance that originated in Jamaican dance hall music and—in the course of being adopted by white youths—found its way into punk culture. On the punk-metal crossover in the Bay Area, see Ferris, *Reign in Blood.* and Waksman, *This Ain't the Summer of Love: Conflict and Crossover in Heavy Metal and Punk.*

have encountered before, Repulsion, a pioneering band somewhere in the 1980s no-man's-land between grindcore and death metal, recalls that their drummer Dave "Grave" Hollingshead struggled to keep a steady tempo in the Slayer beat since it demanded a fast cymbal hand. To simplify it, he skipped every other hi-hat hit, yielding the blast beat pattern on the right. This allowed the band to play faster and faster, and soon songs "written to be played at about the speed of a Slayer song" turned into frenzied convulsions, with Grave's drumming constantly on the verge of falling apart. Yet when quantified according to clock time, their snare hits now had a higher beats-per-minute count than that of any other band in the underground—not even Slayer's Dave Lombardo played this fast, even if the benchmark was now no longer the same technique.[46] It is instructive that the band initially termed this the "cheating" drumbeat (a distancing judgment we will encounter again and again), since it simplified Lombardo's pattern. At the same time, this change raised productivity—it allowed for more snare hits in the same amount of time. Quantifying this isolated variable in the outcome abstracts from the concrete labor that produces it, allowing for a re-valuation of values: because its snare was faster, the blast beat was heavier—more brutal—than the skank beat, even if the task itself was changed. The "faster is better" maxim in action.

Thus, we can think of the blast beat as a denser form of musical time than the skank beat, in definition and sound: a kick-snare alternation that crosses a certain threshold of speed. This definition, in its bareness, can stand outside of contingencies. Contingencies like the physical abilities of drummers, the capabilities of recording equipment, and the means to alter recorded performances. Such symbolic purifications are fantasies to be pursued, even if no concrete reality will ever fit them. In the pursuit of such speed, much was sacrificed. Repulsion's records exemplify the uneven results of

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[46] Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016.

early blast beats on record, with the kick drum all but submerged in a torrent of distorted riffs and clanging metalworks. But untangling this noisy cataclysm would fall to the Florida death metal scene, and Morrisound Studio's drum replacement solutions. From this point on, the blast beat's sound began to resemble its inscription in symbolic definitions. But this entailed a disruption in the economy of labor and time outlined so far—technology, and the ominous umbra it acquires in capitalism.

Time and technology in capitalism

Just now, I defined the blast beat as "denser" than the skank beat, by having more snare hits in the same amount of time. But so far, what makes time denser—what makes it possible for "more" of something to happen, for more snare hits to be produced—is simply a different kind of movement, a different choreography on the same rock drum kit, a technique. Technology can make time denser, too. As knowledge and skill are made tangible in machinery, technology raises productivity: we can make more stuff in the same amount of time, with less labor required. This, in theory, should be a blessing.

But if that theory is Marxian, this surge in productivity also appears as a curse: labor, and the ways of life supported by it are devoured—while labor continues to be used to measure value, since the majority of the population depends on wages to make their living. Productivity rises, and the labor hour becomes denser—but instead of leisure, this produces disruption and deprivation. While trying to hold onto older readings of metal music as an expression of working-class resistance has fallen out of favor, Marxism—in the words of Marx himself—was never about class.[47] Rather, "class" was a manifestation of a deeper contradiction: a dialectic of labor and time, mediated by labor being replaced by technology. There is no way to make this transition less harsh, but if Hegel suggests that "Spirit is

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[47] As in a letter to Joseph Weydemeyer from March 5, 1852. Marx and Engels, *The Marx-Engels Reader*, 220.

a bone," then capital surely can be a drumbeat.

A word of caution, before I proceed, since the words "capital" and "labor" can be slippery. The concept of capital developed and used below differs from what Bourdieu calls capital, which is closer to what Marx would call wealth.[48] While in the last analysis, all distinction created by Bourdieuan capital is *arbitrary*, I aim to show how the distinctions made by the blast beat and drum replacement can be understood as operating with a *logic* that is historically specific to capitalism. I thus share concerns with Sianne Ngai's *Theory of the Gimmick*, though she is more invested in the judgment than in the social constraint itself. Ngai theorizes the gimmick as a compromised aesthetic judgment and as a capitalist form. Gimmicks and the way we talk about them reflect the fundamental, maddening contradiction of capitalism: that, in a commodity-producing society where the sale of labor is the foremost way of making a living, technology's ongoing abolition of labor appears as a curse and catastrophe. This ongoing, impersonally compulsive process is what Marx calls "capital."[49] Flying in the face of common misunderstandings of Marx, capital is Marx's theory of why any labor theory of value is anachronistic and untenable. At the same time, the demand of wage laborers that their honest, productive, concrete labor be valued is part of the *political* dynamic of capital—the labor theory thus is not an *is*, an existing fact, but a perennial *ought*. Organizing, collective bargaining, and similar attempts to *realize* the labor theory of value are part of what transforms capitalism—but immanent to

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[48] Marx would also call Bourdieu a follower of Ricardo for endorsing the labor theory of value uncritically—and not as something that constitutes capital as a social relation. On Bourdieu's capital-wealth conflation and ahistorical appropriation of Marx-ish terminology, see Calhoun, "Habitus, Field, and Capital: The Question of Historical Specificity."

[49] The key passage, cited by both Postone and Ngai, may be found in the Grundrisse, in the so-called Fragment on Machines: "Capital itself is the moving contradiction, [in] that it presses to reduce labour time to a minimum, while it posits labour time, on the other side, as sole measure and source of wealth. Hence it diminishes labour time in the necessary form so as to increase it in the superfluous form; hence posits the superfluous in growing measure as a condition—question of life or death—for the necessary." Marx, *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)*, 706. This passage has also been read optimistically, even if this position—branded anarcho-vitalism by Anna Kornbluh—has become less and less tenable. See Ngai, *Theory of the Gimmick: Aesthetic Judgment and Capitalist Form*, 35.

its dynamic.

Specifying capital as a historically specific dynamic grounds a reflexive account of time and technology. This yields temporal concepts that replace and refine what I've preliminarily called quantitative and qualitative above. The temporal categories that Moishe Postone has drawn out of Marx's work—abstract, concrete, and historical time—offer a unique opportunity to relate sound and the social, since time is a medium for music *and* value in capitalism. This will allow us to grasp both the negative cathexis of labor-saving technology and the transformation of the blast beat on record and in the labor expended in performing it. Marx analyzes capitalism as a historically specific form of life, characterized by a growing contradiction between the relations of production and the means of production, or abstract and concrete labor.[50]

These relations are mediated by value, measured by the expenditure of socially necessary labor time, derived from the average level of productivity, or abstract labor. The technological means of production, and with it all material wealth, continue to grow—in fitful, unevenly distributed ways, as the objectification of concrete labor and human knowledge, an alienated "general intellect."[51] Yet each new level of productivity is re-determined as a new base-level, mandating the compulsive growth Postone calls the "treadmill effect" of capital.[52] This amounts to two distinctly capitalist modes of time, one contained within the other: the accumulation of historical time within a "perpetual present."[53]

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[50] Postone, *Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory*, 24.

[51] This contradiction is also expressed in the contradictory ways that the commodity form must be treated in capitalism. Considered as a thing that meets needs, as a use-value, what makes the commodity useful is concrete labor, since it imparts it the qualities that meet these needs (that are themselves created in production). Under these auspices, the commodity is the unit of material wealth, including its technological achievements. But considered as a thing to be traded, as an exchange-value, the labor in the commodity appears as abstract labor, since its value depends on how much labor time was expended on it in relation to the socially necessary labor time, the average level of productivity across a (globally considered) society—abstract time. In this perspective, the commodity is the materialization of the social constituted by labor alienated for wages—the value relation. Postone, 299.

[52] Postone, 293.

[53] Ngai, *Theory of the Gimmick: Aesthetic Judgment and Capitalist Form*, 69.

These categories, as categories of social totality, are dauntingly abstract (like the exposition of Marxian theory possible here) but felicitously, Postone grounds them in two basic modes of time that can be more readily related to musical phenomena like the blast beat.

In abstract time, as concrete time

What replaces my former, less historically specific distinction between the quantitative and the qualitative is a new conceptual pair, that of abstract time and concrete time. At the deepest level, capital has to be understood as a contradiction between the two, where the abstract time of value dominates and de-values concrete time, even as technology raises its productivity. Armed with this minimal Marxist account of abstract and concrete time, I now focus on the blast beat once more: how it can be defined either *in* abstract time or *as* a form of concrete time. But while these perspectives can be occupied by different subjects, they are also forms of objective compulsions in capitalism. The transformation of the blast beat (from its ramshackle origins to a machine-like salvo as implied by its abstract definition) is itself a re-determination of the blast beat as concrete time, driven by how abstract time is used to compare and measure productivity.

Abstract time may be understood as an independent container, an infinitely divisible measure in which events take place—it corresponds to what Mariusz Kozak calls "objective time," Newtonian time, albeit with a historical grounding.[54] As a social fact and mode of consciousness, the rise of abstract time was closely intertwined with the coordination of expanding commodity production in capitalism—and its colonial and imperialist diffusion.[55] Let me give an example of the blast beat in

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[54] Kozak, *Enacting Musical Time: The Bodily Experience of New Music*, 27.
[55] Postone, *Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory*, 202. Clock or machine time, in this account, is driven by the need to coordinate and regulate commodity production at an ever larger, ever more efficient scale. Capital thus doesn't only use technologies (including time *as* technology), it produces technologies according to its needs.

abstract time. When I say that "this album contains blast beats at 220 beats per minute," I use units of abstract time to measure the frequency of sounding events I define as blast beats. By contrast, concrete time is a dependent variable: the time of particular events in human experience. It is qualitatively determined and the historically original mode of being in time. Paradigmatic examples of concrete time are cyclical natural phenomena like the seasons, or tasks, like whatever time it takes to cook a stew. In other words, concrete time is the time a specific labor or process takes. Consider the formulation "the fastest bomb blast Mike Smith can play," which posits time as dependent variable, determined by how fast the drummer of Suffocation can play a specific variation of the technique.[56] This requires him to perform specific motions, under presumably ideal conditions. The list of such specifications could be extended, what matters is that the measure is qualitative and particular, which means not measured according to the universal yardsticks of abstract time.

But abstract and concrete time are not indifferent towards each other. Thus, concrete time is only roughly analogous to Kozak's "lived time", or Bergson's *durée*, since it is not as tightly bound to the capabilities of our human bodies.[57] Going being such a naturalization of the body, the Marxian critique allows us to analyze how some bodily capabilities are transferred into technology, in ways that turn formerly transparent physical processes into the operation of opaque mechanisms. The compulsion exerted by abstract time, and the drive to raise productivity, thus changes what is asked of the body. This can be illustrated if we return to the example of the blast beat as having a certain number of kick-snare alternations in a set amount of time. If we turn this definition from an *is* into an *ought*,

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[56] Mike Smith is the drummer of New York death metal band Suffocation, widely recognized as one of the most-emulated bands in all of death metal. Rather than alternating kick and snare, the "bomb blast" features snare hits over every other hit of a double kick drum roll.

[57] Marx therein maintains the Hegelian distinction between humans as a natural and as a social species: we have bodies, but we also determine what it means to have a body, just as we determine—through our forms of life—what it is to be human.

these events now *have* to fit into the quantitative frame regardless of how they are performed. If a certain drummer cannot play them at this speed, he might need to change his technique, be switched for a different drummer, or be replaced (at least in part) by a machine. This—only slightly contrived—example models how abstract and concrete time are not indifferent towards each other, at least not when an abstract standard of productivity is what is valued. Abstract time thus is also the form of capitalist compulsion, the compulsion to save labor.

The audio-visual single-foot blast

The Florida death metal scene is widely credited with giving the blast beat its modern shape: metrical, even, and powerful. Drum replacement was key to this transformation, but the growing technical mastery of drummers was no less important and driven by the competitive atmosphere of the scene. The discourse regulating this competition was a labor theory. The demand that the value of labor ought to be recognized and compensated explains an otherwise puzzling attachment to the concrete dimension of labor: the Florida death metal scene's obsession with the single-foot blast. The importance drummers accorded to this technique can be confusing since it doesn't sound different than its abject other, the cheating blast beat. But the single-foot blast was not valued for its audible outcome, or in its relation to abstract time. Instead, it was valued as a movement that had to be mastered by drummers to accrue distinction within the scene. This section thus reconstructs the affective attachments drummers in and associated with the Florida death metal scene had to concrete labor—and the conditions in which the blast beat could be imagined as an end in itself, hard to master, rarely seen, and most importantly not produced by technological forces and economic compulsions that lay outside of the scene.

Cheating on the blast beat

By any account, the early years of the Florida death metal scene were highly competitive, with this competition contributing to its development. What is less clear, however, is how much consensus existed in this competitive atmosphere—if there was significant consensus in dissent. Recent studies of the scene tend to portray its early years as a free-for-all, but how it valued the blast beat suggests otherwise. Swiniartzki contends that up to 1992 (right before the commercial peak of death metal), the experience in the scene was one of contingency—a sense that anything was possible. Yet this sense of possibility was also a source of insecurity, and the relief for it was to pursue distinction. By foregrounding the need to stake out the diverse stylistic and ideological niches, Swiniartzki accounts for the period of creative fermentation before the standardization bolstered by the mutual reliance on Burns and Morrisound for production in Bourdieuan terms.[58] From a Deleuzian perspective, Netherton and Snaza also foreground the unregulated, spontaneous creativity of these years. What drove and organized this collaboration was a mutual orientation towards finitude, a *being-in-common* in the face of death, and the animality repressed by mainstream society.[59] But I suggest that even in those underground days, the scene was united in valuing labor: not as a source of profit (that is, abstract labor), but as concrete labor, capable of producing the use-values of the scene and the scene as something to be consumed and enjoyed.

The rules of competition and judgment in underground scenes like the Florida death metal

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[58] Swiniartzki, "Why Florida?: Regional Conditions and Further Development of the 'Florida Death Metal' Scene and the Local Public Response 1984–1994," 182.

[59] Snaza and Netherton, "Community at the Extremes: The Death Metal Underground as Being-in-Common," 345.

Death metal has attracted Deleuzian readings in the past: gore-dripping lyrics, imagery coupled with timbres that suggest bodily strain forcefully underscore attempts at reading death metal as a shared project of taking apart and re-assembling the performing and listening body. See Bogue, "Violence in Three Shades of Metal:" and Phillipov, *Death Metal and Music Criticism. Analysis at the Limits*.

scene can be understood as emanating from a demand that "honest" labor be compensated. While success may be attained in several ways, not all are legitimate. The perennial concerns about "trends" or "posers" are not just a means of establishing a hierarchy within the scene, but also serve to direct productive labor toward the scene. The Bourdieuan approach suggests that owning economic capital impedes the accumulation of (sub-)cultural capital. But this fails to account for *what* is produced when a scene values labor for its concrete form, and not its abstract productivity. The latter, in theory, could produce a commodity that could be exchanged and leave the scene. A permanent watchfulness on the part of scene members thus helped keep the fruits of competition within the local scene. And musically, this policing of labor produced the blast beat, as well as drummers capable of keeping up with its demands.

In the discourse on what labor had to be performed to produce a proper blast beat, the scene's attachment to the limits of particular bodies shines through clearly. Scott Burns, friend, and go-to engineer, recalls how the drummers that frequented Morrisound studios would put each other under surveillance and censure, with the blast beat being the central proving grounds for displays of masculinity and what the scene understood to be honest labor:

> "[…] we all wanted to hear what the guy played, we wanted to hear if he cheated during the blast, we wanted to see if he really did it, right? I mean it was more of a 'man up' thing, right? A code among everybody like, man that guy really does blast, when you hear Pete blast. […] "Everybody knew everybody. Everybody watched everybody. Everybody talked shit about everybody. And everybody said who's good and who was bad, right?"[60]

There is a lot to unpack here. First, we may note that a complex discourse concerning what was and was not "cheating" existed in the scene. Second, "really" playing a blast beat, a "true" blast had a moral dimension for the scene. Cutting corners was dishonorable and would be sanctioned as "unmanly."

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[60] Into the Darkness Interview Series, *1 Hour 36 Minutes with Scott Burns* 30:00-32:16.

And third, while it may seem like a slip of the tongue, Burns implies that one had to "see" and "watch" to judge whether or not drummers were cheating. Other drummers confirm that *seeing* blast beats was essential, with the "true blast beat" being as much an object of the gaze as of the aural sense. As an audio-visual symbol of masculinity, the blast beat thus parallels Steve Waksman's characterization of the electric guitar as rock music's "technophallus."[61] But as a practice dependent on visual verification, the blast beat was unstable.

While this focus on the visual dimension locally may seem paradoxical at first, it is a logical consequence of the media ecosystem that made death metal available globally. Early on, tapes and zines were common, but video footage wasn't. This scarcity made it hard to learn the nuances of the new drum idiom. The competition that refined the blast beat thus took place under the condition that R. Murray Schafer called "schizophonia", the splitting of sounds from their former source.[62] But while the ultra-fast playing often turned inscrutable on early, low-budget tape demos, the blast beat considered to be the "true" blast beat by the Florida scene took this ambiguity to a new level altogether. Its value did *not* stem from its sound, or how fast it allowed one to play. Rather, it was valued for the physical labor invested—which had to be seen to be learned and judged.

Seeing Sandoval's single-foot blast

The single-foot blast's distinguishing mark is evident from its name: only one kick drum pedal is used to perform the kick-snare alternation. The technique is closely associated with Pete Sandoval (referenced just as "Pete" by Scott Burns above), who set the benchmark against which other drummers

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[61] Waksman, *Instruments of Desire: The Electric Guitar and the Shaping of Musical Experience*, 88.

[62] By alluding to schizophrenia (itself anachronistically named), Schafer treats this outcome of sound recording as psychologically abnormal on purpose. Yet compared to the value-neutral "acousmatic," schizophonia emphasizes *distance* (in time and place) over the lack of visual information. Since the Florida death metal scene valued locality and concrete time, to them, recording and its splitting effect did constitute a pathology. Schafer, *The Soundscape: The Tuning of the World*, 90–91.

were judged. In the words of Dave Witte, a fellow drummer, Sandoval "is the guy responsible for making the blast beat what it is. He made it work right by making it powerful, as well as being in time."[63] Through a series of demo tapes he recorded with the LA-based grindcore band Terrorizer, Sandoval came to the attention of Florida death metal band Morbid Angel. With Terrorizer, Sandoval performed blast beats on a single-pedal kick drum. Once he joined Morbid Angel, he incorporated a double-pedal kick drum into his playing for rolls—but not for the blast beat. This established a precedent that codified the hierarchy of blast beat styles in the Florida death metal scene. Even if one had access to a double-pedal kick drum, one was not supposed to use it for the blast beat.

The scene vilified use of the double-pedal kick drum in the blast beat as a labor-saving device. As double-pedal kick drums became increasingly commonplace, they gave drummers a means of achieving fast blast beats, but without the same physical effort. If we take the kick-snare alternation of a blast beat as two streams, the two-foot blast distributes the kick stream onto the two feet. This, in turn, reduces the demands placed on the drummer's feet: pedaling is now half as fast, and each foot only does half the work. Roddy, who learned the technique in Florida, implicitly considers the single-foot blast the default when he presents the two-foot blast as a variant of it. According to him, the "loving" name for the technique was "economy blast."[64] Its less-than-loving epithet was, of course, the "cheating blast." A fellow drummer, John Longstreth, recalls that when he visited Florida in 1997 to learn the blast beat, he was "shocked by how everyone at the time was so concerned with the 'single foot vs. the two foot,' and how one was 'cheating' with the two-foot."[65] The difference between a "cheating" and "honest" blast beat came down to the movement the drummer performs since aurally,

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[63] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 7%.
[64] Roddy, *The Evolution of Blast Beats*, 22.
[65] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 47%.

the single-foot blast and two-foot blast are nearly indistinguishable.

The aural inscrutability and physical demands of the single-foot blast only added to the prestige of the technique and those who mastered it. When Napalm Death heard that Repulsion's Dave Grave played on a single-pedal kit, they at first did not believe this was possible.[66] Such wonder and bafflement was common. Snaza and Netherton write that the interviews collected in *Extremity Retained* are: "full of accounts of extreme metal drummers hearing Pete Sandoval play [...] and having no idea how he was physically doing what he could do," noting that this desire was further stoked by the scarcity of film footage of the technique at the time.[67] But they do not account for the additional complication of the single-foot blast and its inflated reputation, a reputation that likely spread through the letter and phone networks of the scene. As a visual object, the single-foot blast would have been a valuable souvenir for those trying to master it. When the short-lived Japanese death metal band Martyrize visited Tampa in 1990, their members recorded Sandoval practicing in a Florida garage complex. As soon as he switches to a blast beat pattern, the camera pans downward—as if to document the perplexing motions of his foot.[68]

Even if the single-foot blast technique can easily be learned from video footage now, its details were virtually impossible to deduce from sound alone. To achieve fast single-foot kicks, blast beat drummers rely on the spring of the pedal to push their foot back into the original position. At high speeds, the motion must come from the ankle joint, which acts as a hinge for the foot. One of the main concerns when performing sustained, fast ankle motions is lactate buildup and cramping. To

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[66] "Dave never used double bass in REPULSION, that's all single bass. I think I had this discussion with NAPALM DEATH when I first met 'em and they found it extremely hard to believe that Dave was doing the blast beats with the single kit but it's true." Ramadier, "Repulsion Interview."

[67] Snaza and Netherton, "Community at the Extremes: The Death Metal Underground as Being-in-Common," 344.

[68] Uploaded from a private collection at: https://www.youtube.com/watch?v=F4OIFPOV0Rg

avoid fatigue from overuse of the small muscles involved, such as the tibialis anterior, drummers will often let their feet "swivel" in an X-pattern across the pedal. In addition to reducing fatigue by spreading the stress around, this also helps keep the mid-foot centered over the pedal. It may seem ironic that this delicate, counter-intuitive motion would be a site where masculinity could most effectively be claimed. But from Liszt's three-hand illusions onward, virtuosity casts its spell by making the link between the aural and visual appear provisional at best. The contribution of the scenic media that Swiniartzki credits for inaugurating the migration to Florida, then, is what tapes and fanzines *cannot* disseminate: they capture the sound and name, but not the mandated choreography of the blast beat.

That the value of the single-foot blast was tied to an embodiment that had to be seen also upends views where the use of the double-pedal kick drum is seen as representative of extreme metal values. As we have seen, for many death metal pioneers, the ends did not justify the means. This challenges David Pearson's contention that the main difference between punk and metal blast beats is that the former uses a single pedal (since precision does not matter), the latter two pedals (since precision does matter).[69] To be sure, the scene's attachment to the single-foot blast was willful and anachronistic, but it served important functions for the Florida scene. As a holdover from humble origins on undersized drum kits, its benchmark began to serve a different function as the scene developed. Now, it encouraged drummers to keep up with the bar set by Sandoval. But the standard of productivity that had to be met was not just sound or some standard of speed in abstract time.

The single-foot blast, tied to the limits of concrete bodies by the scene's surveillance was valued as something beyond what could be symbolized in a definition, or transmitted by sound. This prestige

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[69] Pearson, "Extreme Hardcore Punk and the Analytical Challenges of Rhythm, Riffs, and Timbre in Punk Music," par. 23.

technique was less portable than blast beats in the abstract, a bastion of concreteness against easy appropriation by interests beyond the scene, To claim ownership of it, a drummer had to discipline their body, and this discipline was most easily learned locally, making it scarce, which, in turn, made it possible for the Florida death metal scene to own the technique. But this ownership was precariously contingent on how death metal *used* to be recorded and disseminated.

Fidelity, intelligibility, and verification

Once it had turned into an arena where masculinity could be claimed and contested, the question of how to record the blast beat acquired a new dimension—it was now a charged matter. Since it was valued as concrete labor, the propriety of the drummer's efforts demanded documentation. If replacing some of the labor with a double-pedal kick drum was *verboten*, then reinforcing velocities or correcting missed hits in the studio surely was beyond the pale.

Viewed from this vantage point, the blast beat demanded a fidelity paradigm.[70] In an early account that makes no mention of drum replacement, Scott Burns uses language that suggests Morrisound was particularly good at capturing the nuance of "honest" non-cheating blast beats.

> […] there was a little more definition and clarity with what we were doing. And for the American bands, the drums were very important to them, and playing correctly and being able to blast, and no clicking your sticks on tom fills, and not cheating—things like that.[71]

But since one's position within the scene was at stake, the prestige associated with mastering the blast beat also fueled a desire to show off one's physical mastery to others, even in the acousmatic medium of recording. To let the ears see. We might thus understand the cathexis of the single-foot blast's concrete concreteness as a subconscious desire for the abstraction provided by drum replacement.

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[70] James Lastra has theorized fidelity and intelligibility as two poles of understanding the ontology of stored sound in the context of film music. Lastra, "Fidelity versus Intelligbility."

[71] Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 183–84.

The drummers of the Florida death metal scene found themselves in a double bind, a more specific instance of the heaviness paradox. To verify whether or not a drummer is "cheating" on his blast beats, a documentary approach to recording would be required: a *fidelity* paradigm of recording. Yet due to the emerging conventions of death metal (rapid tempos and small subdivisions in all parts, high levels of guitar distortion, and growled vocals) the laws of acoustics mandated technological intervention in the service of *intelligibility*, so that the merely heard could be judged as to whether or not it was executed properly. Of course, fidelity and intelligibility always had been at odds. Otherwise, studio engineers would not be discarding takes, overdubbing, multi-tracking, sequencing, sample-replacing, copy-pasting.[72] Yet even if engineers and musicians are aware of the ontological difference between any physically possible performance and studio production, the fantasy of the latter being a transparent representation of the former remains attractive.

The persistent fantasy of fidelity in recording originated in the analog media ecosystem that death metal and the blast beat emerged from. Not only did the single-foot blast receive an esoteric veil from the lack of video footage at the time, but the technique also became an index of a period in death metal's recorded history *before* performances were routinely edited and enhanced, before the Morrisound production ideal became hegemonic. It marked the passage from metal-becoming-extreme to death metal proper. In Chapter 1, I covered how the low-budget demos of Hellhammer *aspired* to the form of the commercially released album. But from the vantage point of the new influx of capital, the labor-centric ideology of death metal drumming began to *look back* to demo tapes, since they promised to be very close to live recordings of an unbroken performance. Often, they were made with portable recording equipment in garages or other rehearsal spaces. If they were used at all,

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[72] Perhaps the most cogent the history of sound recording is its removal from recording singular events and bodies. Zagorski-Thomas, *The Musicology of Record Production*, 124.

overdubs were only used for guitar solos and vocals. For example, the technical ability of Suffocation—whose drummer Mike Smith I've brought up before—was powerfully underwritten by the minimal budget and editing of their initial releases:

> It was all tracked together live, with the amps facing the walls so there would be less of a bleed in the sound, and Frank [Mullen] did his vocals afterwards. We pretty much had an offer from every label around then.[73]

The analog, low-tech nature cemented their function as a means of verifying the dedication of bands to the underground—and their skill as songwriters and performers. And, rather than undermining the demo tape as an institution, digitalization only strengthened the attachment to it. Keith Kahn-Harris has observed that even as the media ecology of metal changed from paper zines and tape demos to wholly digital formats, the basic trajectory of a band's "scenic career" has remained essentially the same: Recording one or multiple demos is still considered obligatory, even if they are disseminated on Bandcamp and recorded using a digital audio workstation.[74] Arguably, this hollowing-out of the demo tape into a pure form, a symbol, is best explained by its past function a "certificate" of what a band could do with minimal capital—a reflection of their labor power.

Before I return to drum replacement and how technology transformed the blast beat as time and labor, let me take stock of the ground covered so far. The complex of the single-foot blast beat, valued for *how* it is performed, but this *how* is nigh-impossible to hear, is perhaps the most acute symptom of the Florida death metal scene's attachment to concrete labor. But eventually, the wish to transfer this incorporated, masculinist competition of the local, visible, in-person Florida death metal scene into the acousmatic medium of recorded sound was fulfilled by Morrisound Studios—even if this was the death knell of the single-foot blast's value.

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[73] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 49%.
[74] Brown et al., *Global Metal Music and Culture: Current Directions in Metal Studies*, 344.

Re-inscribing the blast beat

A small recapitulation before the final *stretta*, then, since we have covered much ground since I introduced drum replacement. In the two sections devoted to the blast beat, I argued that its minimalist pattern implied a pure, symbolic blast beat, untainted by the fallibility of the flesh that performed it—and then I argued that the Florida death metal scene valued its most prized blast beat *for* being limited by this concrete dimension since it guaranteed the labor invested in it remained within the scene. What united these perspectives conceptually was, on the one hand, the split temporarily of the blast beat from the previous section, and how its abstract and concrete dimensions are isomorphic with the core contradiction of capitalism. On the other hand, I also intimated that the history of the blast beat could be understood as a *teleological* movement from its all-too-human, all-too-concrete origins towards something closer to its symbolically pure form—but now in the medium of recorded sound.

Morrisound pioneered drum replacement, which re-inscribed the blast beat *into* abstract time, thus realizing the blast beat's latent ideal. This is the positive side, which motivates embraces and defenses of drum replacement. But this re-inscription was also compelled and driven *by* abstract time, as a manifestation of economic compulsion and capitalism's labor-saving. This umbra fuels negative attitudes towards drum replacement, and attachments to the blast beat as an index of a lost, pre-digital era. When I gave examples of the blast beat in abstract time and as concrete time, I suggested that these forms of time were not indifferent towards each other in capitalism. Abstract time—as the measure of general, abstract labor and productivity—continually transforms how concrete time is experienced, and what concrete labor is done. The term for this outcome of the treadmill effect of capital is *real subsumption.*

The real subsumption of labor under capital occurs whenever "abstract labor begins to quantify and shape concrete labor in its image; the abstract domination of value begins to be materialized in the labor process itself."[75] Culture is now reproduced based on this value-form: particular values that humans might hold now serve one abstract value, with ways of life disappearing just as they are created.[76] Objectively, both *what* is produced and *how* it is produced is now shaped by the need to maintain value by producing surplus value. Mediated through politics, this real subsumption is articulated into distinct historical regimes of accumulation, each with a unique spatial character: Fordism fragmented the labor process domestically on the assembly line, and what David Harvey has called post-Fordism, more familiar as neoliberalism, fragmented this fragmentation across the globe.[77] The objective compulsion also has repercussions for values in the plural, as our substantive attachments to particular goals we consider worthy. At least at the highest level of analysis, we now produce to produce, not to produce what we value. But based on the relative position of a field or individual in the total production process, this compulsion asserts itself differently, aligning more or less closely with what they take to be *their* values.

This brings me back to the question of necessarily contradictory standpoints. While all are subject to the abstract domination of capital, not every individual experiences this in the same way[78].

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[75] Postone, *Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory*, 182.

[76] Marx regarded the abstract indeterminacy of what is produced by capitalism as part of its emancipatory potential. In prior forms of life, property meant belonging to a community, and the value of economy was reproducing that particular way of life in individuals. In capitalism, individuals serve production—but "when the limited bourgeois form is stripped away", Marx writes, wealth would emerge as "the universality of individual needs, capacities, pleasures, productive forces, etc., created through universal exchange" and no longer "measured on a predetermined yardstick". While anarcho-vitalists want this pure becoming in capitalism (where it can appear monstrous), Marx considers it a possible future once the limit of capital is overcome. See Marx, *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)*, 487–88.

[77] See the respective chapters in David Harvey's seminal study. Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*.

[78] This is not meant as an unmasking of the "true" motives of capitalist subjects, as Postone reminds us. "The Marxian critique, then, does not simply 'expose' the values and institutions of modern civil society as a facade that masks class relations, but grounds them with reference to the categorially grasped social forms." In volume III of Capital, Marx

The label executive, whose performance is measured by whether or not the albums he has invested in manage to recoup this investment, will experience the imperatives of capital differently than a musician or a studio engineer. His investment—as capital—is past labor, translated into abstract time: time in the studio, and the remuneration of the engineers and producers who work there. His sober, economic interest is to make sure this advance is not wasted—and, seen from the economic side, his aesthetic judgment is an instrument finely calibrated to sniff out promising investments.[79] Studio personnel, then, occupy a position that is manager and artist at once: on the one hand, they have to maximize what can be done in the time a label or band has purchased, on the other, they may well hold strong aesthetic convictions that are hard to harmonize with more brute necessities. Musicians, finally, have the strongest attachment to the aesthetic—because, in underground scenes, they typically cannot make a living from their music, and so need to make a living primarily through wage labor. Thus, while economic and aesthetic explanations for actions or attitudes are available to all, not everyone needs to harmonize necessity with what they take to be their own, personal values to the same extent.

The compulsion exerted by abstract time is openly acknowledged by Morrisound's engineers. Recalling his earlier quote, Jim Morris, explains the studio's development and adoption of drum replacement systems as a response to the expensive nature of studio time and the relative lack of

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employs the metaphor of "character masks" to describe these forms—where, in best Hegelian fashion, the surface is as true (or untrue) as the appearance. *Postone, Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory.*

[79] Certainly, female record executives exist as well—but the most (in)famous label officers in the historical record of death metal are Digby Pearson and Monte Conner. That Conner's sober comments on cutting his (and his label's) losses with death metal are recorded by Mudrian is one of his book's greatest virtues. Speaking of the response to the disappointing sales in the mid-1990s, Conner told Mudrian: "But soon we pretty much decided to get rid of the bands that we didn't feel had a future—bands like Gorguts and Sorrow, who should have never really been signed, and Immolation who, at the time, took four years to write a record. We got rid of those bands, but we kept Obituary and Deicide, because they were such important bands for the label at the time and they really helped break the label. Maybe at the time we realized that those bands were never gonna be any bigger, but at the same time they were workhorses for the label and we made a profit on them and so forth, and it's like, how can you drop those bands? It was really important, because if we would have just dropped all of the death metal bands there would have been an identity crisis." Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 231.

technical refinement among the bands that wanted to record at Morrisound. His judgment on the musicians he recorded with—"90% could not do" the blast beat—is comparatively harsh, perhaps because he had a greater direct financial investment, being one of the owners of Morrisound Studios. In a notably milder register, Scott Burns, confronted with Morris' comments on a podcast dedicated to metal history, concurs. He recommends bands ought to record material they can play, recalling that in his time, "the tendency was to blast, to be the fastest, to do that. And some guys could do it better than others, and some guys needed help.[80] From this perspective, replacing many wavering strokes with one repeating sample is nothing but dead labor taking the place of concrete, living labor, echoed perfectly in the digital medium.

But the blast beat also found its aesthetic fulfillment in its digitally perfected form. I argued that the blast beat has a dual nature: a pure, symbolic definition, which implies perfectly even pulse streams. The limits of the body and the physical properties of the acoustic drum set kept blast beat performances from resembling this elusive ideal—even as it was present, whenever the blast beat was put into words. The flip side of this pure, abstract blast beat are thus infinitely many concrete blast beats, some of which were valued not for their sound, but what they asked of particular bodies. But over time, through drum replacement, and through performers trying to pace with the records thus perfected—like an echo of the films used to train the assembly-line workers of Taylorism—the concrete blast beat changed. Morrisound and the Florida death metal scene *defined* the blast beat—by making it fit its sound fit its definition, at least on record. But the redetermination of the blast beat's time— the parts contributed by labor and technology, respectively—also had unintended consequences. From the vantage point of the labor lost to the digital, drum replacement and the blast beat are *necessarily*

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[80] Into the Darkness Interview Series, *1 Hour 36 Minutes with Scott Burns*, 44:20-44:28.

false—not because they are mistaken, but because they reflect conflicting—and thus "false", in dialectical terms—social necessities.

Necessitated by the blast beat, drum replacement challenged death metal's inherited notions of independence from mundane, economic concerns. Filtered through decades of scenic memory, the digital continues to signify a scandalous heteronomy, a determination from the outside. However, the Florida death metal scene's attachment to the blast beat is only one experience of drum replacement. As subsequent chapters show, the different positions others took in relation to drum replacement were key in staking out extreme metal's universe of subgenres. But before returning to this internal differentiation, a brief interlude examines how another form of time axis manipulation—backmasking—could be used to speak in a different voice to extreme metal's inside and outside.

INTERLUDE. BACKMASKED QUOTATIONS

Time axis reversal, which the phonograph makes possible,
allows ears to hear the unheard-of: the steep attack of instrumental sounds or spoken syllables
moves to the end, while the much longer decay moves to the front.
— Friedrich Kittler, Gramophone, Film, Typewriter[1]

Beginning backward

Like any subgenre, death metal has many beginnings: it would be futile to look for that one event or album that tipped the scales before critical mass has been achieved. Only after that point do struggles over this history begin, as the new subgenre's adherents start to single out "true" beginnings. (In that sense, the origins of all genres are heard backward.) But why would a death metal record begin backward?

Morbid Angel's debut album, *Altars of Madness,* is one beginning we might pick—as it helped make death metal a known quantity while raising the bar in terms of virtuosity.[2] The year of its release, 1989 brought death metal to broader attention. Labels like Earache Records and Roadrunner Records produced several albums at Morrisound Studios in Florida. These releases were promoted with the brief-but-influential Grindcrusher tour, which saw Morbid Angel join forces with Earache's earlier roster of British grindcore bands. Together, they introduced European audiences to new benchmarks in speed and ferocity.[3] At the time, Morbid Angel was vocal about the combativeness of their ambition. Trey Azagthoth, lead guitarist of Morbid Angel, recalls that he "really believed that bands were

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[1] Kittler, *Gramophone, Film, Typewriter*, 35.

[2] At least the *authorized* debut: the band shelved an earlier full-length album recorded in 1986 because they found its production and drumming unsatisfactory. I cover this and other instances of death metal albums held back prior to Morrisound establishing a viable paradigm in Chapter 3.

[3] Morbid Angel's impact on the Swedish death metal scene in particular was considerable, with fanzine editor Roban Becirovic recalling that "Morbid Angel's Altars of Madness changed everything. Before that there was no clear distinction between death, speed, or thrash among regular metalheads. It was just brutal metal. But Altars of Madness opened people's eyes, and made us realize something new was going on. Everybody bought that record. Everybody. And thrash was executed by it — the whole genre just disappeared." Ekeroth, *Swedish Death Metal*, 140.

challenging each other, trying to outdo each other and make each other quit."[4] In an interview given during the Grindcrusher tour, Azagthoth calls out fellow Florida death metal band Death for releasing albums that were slower than their demos.[5] *Altars of Madness* was a challenge to death metal, just as the subgenre began to find its voice.

More precisely—to anticipate my argument in this interlude—I suggest we can hear the album's introduction as a challenge to other bands *because* we hear it backward. "Immortal Rites," the first track on *Altars of Madness,* begins with something readily recognizable as a guitar riff, but superimposed on a shuffle of hisses and a few recognizable drum hits.[6] The guitar's angular gesture and the odd percussion repeat just shy of four times. Then, they are suffocated by a snare hit, a snare hit that reverberates unnaturally in a space that all of a sudden is completely quiet, until—the guitar riff begins again, from its true beginning, its time axis no longer reversed. Up to the snare sample, everything was played back in reverse.

If such backward playback is used to conceal a message—verbal, or, as we will see, musical— it is called "backmasking." The term is not a neutral technical description: it is saturated with a history of moral panics. *Merriam-Webster* defines backmasking (or backward masking) as "the encoding of audio materials (such as words conveying a secret message) on a recording in such a way that they can only be heard and understood when the recording is played backwards." The definition is innocuous enough. In the same dictionary entry, a demonstration of backmasking's use—a piece of state legislation from 1982 introducing warning labels for it—reveals it as a fighting word that entered use during the so-called "Satanic panic."[7] In the 1980s, a bipartisan alliance of Christian conservatives and

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[4] Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 87.
[5] Hypnosia #2, 1989. https://sendbackmystamps.org/category/all-fanzines/fanzines/hypnosia-zine-swe/.
[6] Morbid Angel, *Altars of Madness.*
[7] "Of the new bills, Rhode Island's is unique in that it calls for several different labels, including one that says

self-appointed custodians of decency attempted to outlaw or at least regulate the subliminal messages it supposedly concealed. What backmasking could mean for extreme metal has to be understood against this legacy of censorship and fear.

In this interlude, I use the introduction of Morbid Angel's "Immortal Rites" as a prism that refracts how extreme metal introductions respond to external fears around backmasking, but also quote and gesture to the introductions of other metal records. In this double capacity, these introductions help constitute extreme metal as a genre *against* an imagined outside—but also serve as a medium to support or challenge peers *within* its boundaries, underscoring subgeneric alliances and differences. Heard against the exoteric and esoteric meanings of these introductions, the backmasked riff that starts "Immortal Rites" can be heard as a challenge to the musical abilities of other bands—and as a showcase for the production efforts of Morrisound Studios. Exploiting the expressive potential of this highly charged media-political environment, Morbid Angel's backmasked riff sent a message. The band did not need to evoke Satan in words. Instead, Morbid Angel cast their spell with twisted riffs—and how Morrisound Studios made Pete Sandoval's drums speak. In addition to illuminating how inequalities around digital production crept into introductions, this interlude also serves as an occult introduction to Chapter 3.

Before I proceed, I want to clarify that I do not mean to attribute intentionality when I write of intertextual references. Often, what sounds like direct iteration is unconscious or indirect—generic—influence. The meanings and references of the introductions I examine—in Slayer's "Hell Awaits" and in Morbid Angel's "Immortal Rites"—are *ascribed* meanings. These connections have to

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'parental warning: this record contains backmasking that makes a verbal statement when this program is played backwards'." Merriam-Webster.com Dictionary, s.v. "backmasking," accessed October 7, 2022, https://www.merriam-webster.com/dictionary/backmasking.

be *performed* in the act of recognizing similarities that may or may not have been intended by the artist.

First, I sketch out the cultural history of sound reversal, which eventually attracted scrutiny from political forces that tried to outlaw it—and thus became backmasking. Second, I argue that the moral panics around backmasking in the 1980s ushered in a new appropriation of horror aesthetics in extreme metal introductions. While earlier metal bands evoked supernatural horror from a standpoint that cast it as a threat to be feared, bands like Venom responded to attempts at censorship by defiantly including backmasked Satanic messages on their records. Thirdly, I explore how these self-consciously transgressive introductions have exoteric and esoteric meanings. Turned to the outside, they are a deliberate provocation, a calculated confirmation of the worst fears detractors might have; however, to fans able to decode their intertextual references, these introductions strengthen the bonds between bands and records. To give an example of this building of audible community, I analyze how Slayer's outwardly Satanic introduction to "Hell Awaits" includes tongue-in-cheek references to introductions by Venom. Finally, I return to the introduction of Morbid Angel's "Immortal Rites," interpreting it in light of the social and metal-specific history covered.

Moral reversals

By definition, backmasking is something in excess of recording a sound and playing it backward. But the two are often conflated. The "masking" in backmasking implies that this technique is concealing something—most commonly, a spoken message. While this clandestine dimension eventually became associated with the occult, earlier perceptions of reversing sound were more innocent. To understand how backmasking fits into the extreme metal introduction as a genre in its own right, we need to follow this transformation of an innocuous recording technique into a symbol that could stand in for dispatches from hell.

From reversing sound to backmasking

As a cultural formation, backmasking did not emerge contemporaneously with the technologies that made it possible, even the inventor of modern occultism soon enlisted reversed sound to his cause. Just after its invention, Thomas Edison advertised the gramophone's ability to reverse sounds as a tool that could spur creativity: "It may be used as a composer. When singing some favorite airs backward it hits some lovely airs, and I believe a musician could get one popular melody every day by experimenting in that way.[8] The formal properties of such reversal are still the focus of self-styled polymath and prophet Aleister Crowley, who recommends the adept of the occult arts to listen to reversed records to train himself to think backward. For Crowley, the indifference towards symbolic meanings is the point, since "[t]he brain will be found to struggle constantly to right itself, soon accustoming itself to accept 'esroh' as merely another glyph for 'horse.' This tendency must be constantly combatted."[9] What was to be learned from the record player was disobeying the flow of time and extending one's memory beyond one's lifetime into past lives. But while posterity forgot the formal *magick* that interested Crowley, the association with the occult stuck.

The reversal of sound gained its initial reputation for masking hidden truths in the 1960s, when the Beatles popularized the technique—and inspired political backlash and urban legends. Among the widely disseminated sonic innovations of *Revolver* were reversed instrumental and vocal parts, just as the band began to attract the attention of a nascent, largely Christian-conservative anti-rock movement.[10] John Lennon's proclaimed popularity contest with Jesus, crediting the discovery of

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[8] Quoted in a contemporary biography of Edison, first published in 1879. McClure, *Edison and His Inventions*, 80–81. Through secondary literature, Kittler mistakenly attributes the quote to the Columbia Phonography Company, whose executives likely possessed more musical acumen than Edison. Cf. Kittler, *Gramophone, Film, Typewriter*, 35.

[9] Crowley, "תישארב, Liber Viæ Memoriæ," 111.

[10] Zak, *The Poetics of Rock: Cutting Tracks, Making Records*, 35.

reversed sound to the use of marijuana, and the inclusion of Aleister Crowley on the cover of *Sgt. Pepper's Lonely Hearts Club Band* further fueled right-wing antipathy.[11] But the popular imagination was set ablaze by the urban legends that formed around "Revolution 9," the outsize coda to the so-called "White Album," also known as *The Beatles*. Supposedly, "Revolution 9" contained clues that Paul McCartney had died. The chatter apparently began on college radio station in the Midwest and soon spread to national news.[12] Eventually, *Life* magazine ran a feature to assure fans that Paul was not dead. But that killed neither the rumors nor the growing fascination with backmasked messages.

In 1982, precise definitions of backmasking made national news. Amid a moral panic around ritual abuse and a rampant Satanic conspiracy, legislators at the state and federal level introduced bills that would ban or mandate cautionary labels for records that featured reversed messages. Concerned constituents egged these efforts on, some citing religious objections, while other expressed worries that backmasking was a form subliminal messaging that interfered with consumer choice and parental authority.[13] While these bills failed, the publicity they attracted fed into already-overheating rumors of a Satanic threat. Lurid—and wholly unsubstantiated—books like Lawrence Pazder's *Michelle Remembers* fueled a belief in organized Satanic human sacrifice and child sexual abuse.[14] In hindsight, this mass psychosis is hard to comprehend. I understand it as the foam of the wave that carried Ronald Reagan into office: a fear of the Cold War turning hot again, a Christian Right proselytizing against

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[11] Sullivan, "'More Popular Than Jesus': The Beatles and the Religious Far Right," fn. 14.

[12] Countless retrospectives of the episode exist, e.g. https://www.rollingstone.com/music/music-features/paul-mccartney-is-dead-conspiracy-897189/.

[13] Brackett, "Satan, Subliminals, and Suicide: The Formation and Development of an Antirock Discourse in the United States during the 1980s." In the end, as Brackett shows, eventually, the Satanic panic sputtered out, as hip-hop became a scapegoat for urban crime.

[14] For a sociological analysis of how religious sentiments, pseudo-scientific huckstering, and suggestive questioning of children led to wrongful convictions, including life sentences (that were later vacated), see de Young, *The Day Care Ritual Abuse Moral Panic*. Adherents of the syncretic QAnon conspiracy theory continue to subscribe to the notion that secretive cabals commit ritual abuse today.

supposed moral decline, and a neoliberal backlash against the welfare consensus of Fordism. In the

torrent of this rapid realignment of political and economic forces, scapegoats were in high demand. In

this climate, backmasking became something more than a technique: it was paranoia made audible,

and yet another crosshair on the back of metal music.

At its peak in 1985, the anti-metal front was bipartisan. While the infernal content enraged

the evangelical New Right, Tipper Gore's Parents Music Resource Center (PMRC) focused on

protecting supposed victims of rock and metal music. With this patronage, a cottage industry of anti-

rock experts with academic credentials further fanned the flames. Carl Raschke, a scholar of religion

with a talent for the tabloid form, educated Americans about the dangers of Satanism in books and on

television. To Anton LaVey and the Church of Satan, Raschke misattributed a theistic belief in Satan

and an endorsement of human sacrifice, portraying them as a shadowy cabal with global influence.[15]

While pulpy prime-time documentaries and congressional hearings delivered no major legislative

victories, the powers attributed to backmasking inspired several civil wrongful death lawsuits. Bereaved

parents sued first-generation metal musicians like Ozzy Osborne and Judas Priest, alleging that they

had inspired their children's suicides with hidden messages on their records. In the case of Judas priest,

backmasking formed part of the defense's case. Singer Rob Halford played "hidden messages" he had

found on his own records. The jury got to hear—and chortle at—nonsense in the vein of "Hey look,

Ma, my chair's broken." Rather than deviously hidden messages, these were products of the human

propensity to perceive meaning where there is none.[16]

Ultimately, efforts to criminalize backmasking failed—largely because there was nothing

affirmatively Satanic about the earlier protagonists of metal music, who typically invoked the occult as

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[15] Dyrendal, *The Invention of Satanism*, 102.
[16] Walser, *Running with the Devil. Power, Gender and Madness in Heavy Metal Music*, 146.

something to be feared, not endorsed. The threat of censorship nonetheless resonates in the defensive stance of earlier metal scholarship, as noted by Juliet Forshaw.[17] The tone was set by the final chapter of Walser's *Running with the Devil,* which refutes the claims made by Tipper Gore's PMRC and Raschke with close analysis. When the lyrics of Ozzy Osbourne, Judas Priest, and Iron Maiden evoke occult horror and hopeless gloom, Walser argues, they offer means of dealing with the diminished hopes in post-modernity—instead of an invitation to suicide.[18] While Walser also mentions horror movies, both music and horror movies are treated as immediate ciphers of historical conditions, as independent *texts* written in response to *history*. However, horror movies are also sources that uniquely *mediate* not just the historical imaginary of metal, but also its sounds—including the ones that are used to introduce it.

Introductions and the changing role of horror

Horror movies supplied many facets of metal's multi-media identity from the start. Yet earlier metal bands draw on cinematic horror in a way that differs from the practice of their extreme successors. To self-empower, extreme metal self-marginalized in the face of cultural backlash. Since I will discuss different kinds of boundaries from this point forward—sonic and social, on records, and between groups of people—some terminological clarification is in order. I designate the introductions that form the subject of this interlude as "non-diegetic" introductions, since they do not emanate from the innermost world of metal: its songs, which I pragmatically define as based on one or several riffs played by a core ensemble that includes guitar and distorted electric guitar. These songs can contain introductions of their own: "diegetic" introductions. Non-diegetic introductions, then, ease the listener into the world of metal. The interface for this transfer is the horror movie. As a repository of images

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[17] Forshaw, "Metal in Three Modes of Enmity: Political, Musical, Cosmic," 159.
[18] Walser, *Running with the Devil. Power, Gender and Madness in Heavy Metal Music*, 145ff.

linked with sounds, this multi-media imaginary could evoke the sights of a different world with purely sonic means.

Earlier metal bands used ambient and voice-acted introductions that could *plausibly* be lifted from horror movies to establish a sense of foreboding. Consider one of the earliest metal songs: "Black Sabbath," the first song on Black Sabbath's eponymous debut. It begins with an auditory scene of heavy rainfall and distant church bells, before a distorted tritone riff begins a song whose lyrical protagonist is overwhelmed with terror at the sight of a Mephistotelian visitor: "What is this that stands before me?" A decade later, the occult is still treated with such moralist caution. Iron Maiden's song "The Number of the Beast" begins with a quote from the *Book of Revelations* that the song's title is drawn from. Initially, the band had wanted to hire horror actor Vincent Price to recite it—but his fee proved too steep. Both introductions and songs exemplify the original attitude observed by Walser: they cast the occult and forces of hell as enemies to be feared, not allies for a common cause.[19] Nonetheless, both songs were condemned as Satanic by conservatives in the 1980s. Iron Maiden took a defiant stance on their follow-up album. They included a satirically altered quote from *Revelations* alongside a backmasked impression of Ugandan dictator Idi Amin on the track "Still Life."[20] But while Iron Maiden responded with backmasked gallows humor, other bands took a more aggressive approach.

When budding extreme metal bands doubled down on Lucifer in the face of outrage over their more moralist predecessors, they inscribed this embrace of abjection into their introductions—to confirm the worst fears of their detractors. Venom, once more, codified the earliest instance of this by drawing on *The Exorcist*. The 1973 movie used backmasking to give a voice to the infernal entity

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[19] Walser, 148.
[20] The altered bible quote is as follows: "And God shall wipe away all tears from their eyes; and there shall be no more Death. Neither sorrow, nor crying. Neither shall there be any more brain; for the former things are passed away." Wall, *Iron Maiden: Run to the Hills, the Authorised Biography*, 245.

Pazuzu, which has possessed a young girl. In the course of trying to diagnose her affliction, the priestly heroes of the movie examine a tape recording of her inarticulate babbling. Once played backward, the seemingly inarticulate speech becomes intelligible as blasphemy. By using backmasking as a sonic analog for the inversion of Christian symbols and values, *The Exorcist* cemented its occult connotation. The introduction of Venom's "In League with Satan," the first track from their debut LP *Welcome to Hell*, recreates *The Exorcist*'s use of backmasked blasphemy: "Satan / raised in hell / I'm gonna burn your soul / crush your bones, I'm gonna make you bleed / you're gonna bleed for me." Compared to Iron Maiden, the humor is subtler. Given the title, lyrics, and goat-faced pentagram on the cover, there is nothing "subliminal" about Venom. Instead, the punchline is that anyone who goes looking for hidden Satanic messages on a record titled *Welcome to Hell* is overexerting themselves.

Venom's reclaiming of overt horror ushered in a lasting tradition of more literal horror movie references, which characteristically retain the band's tongue-in-cheek humor. As I turn to examples from the 1990s, when subgeneric distinctions had solidified, I should note that some subgenres are more likely to use spoken excerpts than others. Death metal and non-political forms of grindcore routinely establish their lyrical topics this way, taking three main approaches.

First, direct quotations from horror movies can introduce corresponding topics. Canadian death metal band Cryptopsy samples *The Exorcist III* at the outset of "Crown of Horns," in a humorous gesture. The introduction contains a roar followed by a question: "I do that rather well, don't you think?" The punchline is that the roar is immediately followed by a torrent high- and low-pitched screams at the beginning of the song proper, an onslaught that makes the citation sound like a limpid belch. By gesturing towards fleshly potency, the citation also prepares the carnal Luciferian doxology

penned by vocalist Lord Worm.[21] In another example, New York death metal band Morpheus Descends quotes *Bride of Re-Animator* in the track "Proclaimed Creator," with the quote by the mad scientist Dr. Herbert West establishing the lyrical topic of reviving the dead.[22]

Second, introductions may sample non-horror movies in ways that suggest horror topics, making the source harder but also more rewarding to find. Capharnaum's "Eternal Descent" quotes a threat from the 1983 schlock-jock comedy *Spring Break* ("Amigo… if there is something going on, you will go home in the trunk of ten different cars").[23] Another example is Suffocation's *Despise the Sun*, which begins with a famous soundbite from *The Usual Suspects*, released in the same year ("The greatest trick the devil ever pulled was convincing the world that he didn't exist."), but pitch-shifted down for dramatic effect.[24]

Finally, instead of sampling any particular movie, records may adopt techniques that films employ to suggest the sounds of the demonic—we may call this formal quotation. Once more modeled on the *Exorcist,* Deicide's "Satan Spawn, the Caco-Daemon" also exhibits coordination between the introduction and the lyrics of the song. Over the sounds of blowing winds, sheep bleat in overt anti-Christian, elitist-Satanist symbolism, before a backmasked message plays—which is just the title of the track.[25] The movie-inspired demonic sounds extend into Deicide's vocal aesthetic: by layering high- and low-pitched performances of the same words and rhythms, vocalist Glen Benton is transformed

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[21] Cryptopsy, *None So Vile*. "Capricornus Rex in tenebris / I long to feel the dark caress / Of your cloven hooves; / I seek the loving warmth of your anus / As I place my worshipful / Lips about your teats." While this is pure conjecture, the kiss on the hooves, followed by the fantasy of anal un-birthing, precisely parallels the adoration of Satan in the erotic and anti-clerical paralipomena that Goethe omitted from Faust.

[22] "Blasphemy? Before what God? A God repulsed by the miserable humanity he created in His own image? I will not be shackled by the failures of your God. The only blasphemy is to wallow in in-sig-ni-ficance. I have taken refuse of your God's failures and I have triumphed. There! THERE! Is my creation!"

[23] Capharnaum, *Reality Only Fantasized*.

[24] Suffocation, *Despise the Sun*.

[25] Deicide, *Legion*.

into an inhuman multitude.

In spite of their differences, these introductions help to define the inside and outside of metal in a sonic and social way. Aurally, these introductions build a non-diegetic bridge into the diegetic world of metal songs. Found in media that gives frightful sounds visible origins, they frame vocals, riffs, and forms in a way that removes them further from the everyday world. Socially, these introductions erect a symbolic phalanx against those who would censor metal, while also creating a shared space where bands can display their wit—and fans can test their knowledge of metal and its source media.

Exoteric/esoteric quotations

With this background in place, I now analyze the poetics of backmasking in extreme metal introductions in greater detail. The stigmatization of backmasking enabled a new citational practice in extreme metal introductions, which—like the Roman god Janus—faces in two directions. One face is turned toward a fantasized, puritan mainstream: it speaks with sonic icons drawn from horror movies, carefully chosen to conform to the fears of this mainstream. The other face is turned to fans of metal and horror movies (the overlap is considerable), with echoes of earlier introductions and obscure B-movies testing the connoisseurship of the audience.

Slayer's exoteric horror and esoteric homage to Venom

I propose that we designate these two meanings of metal introductions as "exoteric" and "esoteric," respectively. The difference comes down to the addressee as well as the values and knowledge anticipated in the two groups of addressees. The exoteric signification of backmasking and other aural horror props is organized by the most familiar representations of Satanism and their coding as a moral threat; the esoteric content, by contrast, is only accessible through an intricate knowledge of more

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granular quotations and references, not just to movies, but also to specific metal records.

We can hear a particularly rich esoteric allusion to not one, but several records by Venom in the introduction of Slayer's *Hell Awaits,* a landmark release that set new benchmarks beyond its sonic intensity.[26] Considered from the outside, the 1985 LP's lyrics and packaging pull all the stops to provoke just a bit more than Venom. Over a lake of fire, distorted demonic shapes tear victims limb from limb. In the background, the pentagram-shaped band logo stands on what appears to be a cliff, beholding the carnage. This hellish panorama receives an aural equivalent in the introduction. But while such exoteric provocation inevitably conforms to familiar representations of the Satanic, esoteric allusions to prior records are—by definition—harder to pick up on. Slayer's reference to Venom is a formal quotation, much in the same way that Decide and Venom can be said to formally quote *The Exorcist* by backmasking blasphemy.

Slayer replies to Venom specifically, beyond the mere presence of backmasking. To substantiate this claim, I will tease apart the sonic collage that begins "Hell Awaits," the eponymous first track of the album, before pointing out how its elements are variations on introductions by Venom. This non-diegetic introduction includes a backmasked message that outsiders might read as sincere Satanism, juxtaposed with the emerging sounds of the core metal ensemble. During a minute-long fade-in, the first sounds we can make out are distorted whammy-bar wailing intertwined with voices insistently repeating an ominous mantra: a backmasked "join us." Eventually, a strummed bass pedal point joins in. Although guitar and bass index the expected instruments of the song proper, the absence of any riff—as a minimum, a guitar or bass figure heard before beginning again—makes it clear the song itself hasn't begun yet. Example 6, an annotated spectrogram of the introduction of "Hell Awaits," shows

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[26] Slayer, *Hell Awaits*.

the stark contrast between the non-metrical, non-diegetic introduction and the metrical, diegetic introduction that starts the song proper.[27]
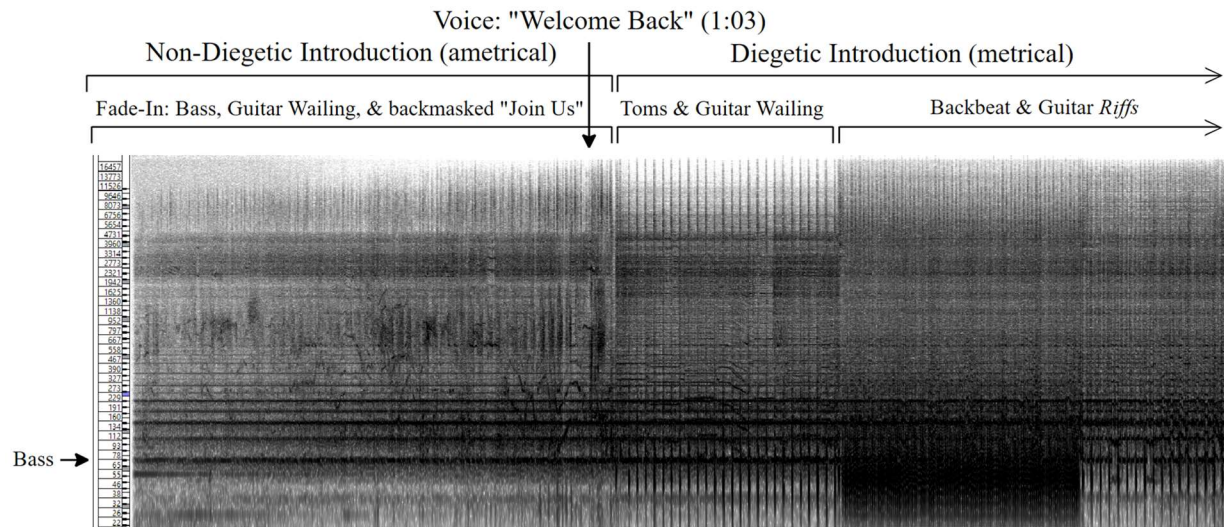
Example 6. Annotated spectrogram of Slayer "Hell Awaits," 0:00-2:30. The "non-diegetic introduction" contains an unmetrical collage of bass, whammy-bar guitar wailing, and a backmasked "join us," the song proper is announced by a distorted, but forward "welcome back."

A distorted, guttural "welcome back" marks the boundary between the non-diegetic and diegetic introduction, the introduction to the song, and the introductory part of the song. The voices drop out as the drums kick in, with tom hits corralling the pulses of bass' D-sharp drone into groups. The guitars whine on for just a bit longer, eventually joining the march-like lockstep. This second introduction *is* a part of the song proper, building up to the song's peak tempo by using ever smaller subdivisions. The unisono tom drum pounding itself echoes the beginning of Venom's "Welcome to Hell," an elementary lockstep that Hollywood cinema has long used to evoke historical or racial Others, from *Conan the*

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[27] Spectrograms visually represent the changing amplitudes in a frequency spectrum of an audio signal over time. They are implicitly three-dimensional, though most commonly represented with two geometric dimensions: typically, the vertical axis represents a frequency scale (either linear or logarithmic), while the horizontal axis represents time. A color (or, in this case, black-and-white) scale is used to represent the third dimension. The spectrogram was created using *Sonic Visualiser 4.1*, free audio analysis software developed and maintained at the Queen Mary University of London. The settings used are: Logarithmic frequency scale, squared amplitude scale from white (lowest) to black (highest), hybrid normalization, window 16384, 75%.

Barbarian to *Indiana Jones and the Temple of Doom*.[28] But by this point, Venom has already been established as a point of reference, with a weave of texture, words, and backmasking, recalling two introductions by Venom.

Slayer's "Hell Awaits" gestures not just to Venom's "Welcome to Hell," but also to a more esoteric source—a tape that Venom would play before their live shows. Although this sound collage would eventually appear on compilation albums, initially, only fans who attended Venom's live shows or received bootleg recordings of them were in a position to recognize the reference.[29] On this tape, Venom employs instrumental and vocal sounds in a way that closely parallels Slayer's "Hell Awaits," with some slight differences. The drone played on the bass is present, but a cacophony of anguished cries over a thunderstorm replaces the backmasked invitations to join the infernal hordes. Then, a demonic announcer, with similar processing as on "Hell Awaits," announces the band's entry: "Ladies and gentlemen, from the very depths of hell…" Still, the debt to Venom—whether intentional or subconscious—is clear, even if the sources are remixed. And by restricting the circle addressed to the most committed, best-connected fans, Slayer's reference becomes more explicit, but also more exclusive.

For those who recognize them, the esoteric references in metal introductions establish historical continuity and display respect for peer bands. To listeners familiar with the sources, the amalgamation of the two Venom introductions positions "Hell Awaits" as a sequel to "Welcome to Hell"—not without humor, since the infernal destination cordially greets repeat visitors. The title of "Welcome to Hell" is alluded to when the audience is "welcome[d] back," after a collage of a bass drone and a chorus

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[28] The archaic signification is conditioned by Hollywood cinema, which uses such drumming to evoke racialized, pre-historic Others to Western modernity. Think of the cultists' drumming in *Indiana Jones and the Temple of Doom*, which is utterly unlike actual Hindustani music.

[29] Venom, *Skeletons in the Closet*.

of the damned. That these voices are backmasked reinforces the allusion to "Welcome to Hell" further, while also bolstering the exoteric scare tactics. The conceit is to use the imaginary of horror and backmasking—which would deter outsiders—to invite informed listeners into a community formed by records and concerts. The communion alluded to by these introductions did materialize after the release of *Hell Awaits*, which was promoted by a tour that saw Slayer support the headlining Venom.

Morbid Angel's backmasked provocation

At this point, I return to Morbid Angel's "Immortal Rites" with a deeper explication of backmasking's exoteric connotations and esoteric poetics in the introductions of Morbid Angel's immediate predecessors. How do prior categories apply to it? Since it reverses a riff, the introduction of "Immortal Rites" does not exhibit the exoteric curated horror of its peers. We may even question if this qualifies as a backmasked introduction at all since there is no concealed verbal message.

I argue that due to the prevalence of backmasked occult messages in the introductions of Morbid Angel's peers, *any* reversed sound on an otherwise explicitly occult-themed extreme metal album carries the connotation of backmasking. In keeping with the *Exorcist* template, the lyrical protagonist of "Immortal Rites" asks to be possessed by Eldritch horrors.[30] Likewise, fan reviews relate the technique to the occult, with one writing that the "reversed debut riff on the first song off the record, "Immortal Rites," showcases just what to expect from the album, yet not revelaing [sic] the unheard, obscure pleasures yet to be experienced."[31] Nonetheless, considered on its own—without the explicit lyrical and visual themes of the record—the introduction lacks the exoteric horror of our previous examples. Instead, the introduction has an exclusively esoteric meaning. It subverts a generic

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[30] "Lords of death, I summon you / Reside within our brains / Cast your spells upon our lives / So that we may receive / The gift of immortality / Bestowed on those who seek you"
[31] https://www.metal-archives.com/reviews/Morbid_Angel/Altars_of_Madness/191/intothevoid/101377 (Accessed 8/7/2022)

convention in extreme metal introductions to position itself as a provocation addressed to knowing peers. The message is the riff, staged as an occult challenge through its reversal.

But for the riff to stand in as the masked message in an introduction, the introduction needs to be signposted *as* an introduction. The fact that what is reversed is instrumental complicates both my exoteric/esoteric distinction *and* the non-diegetic/diegetic distinction, since the reversed sounds all originate from the "world" of the next song. Indeed, were it not for the alien shuffling and hissing of the inverted toms and metalworks, we might well mistake this for an ordinary riff: the distorted guitar's envelope is relatively flat, which means that its beginning and end are sufficiently similar to not radically transform its timbre upon reversal.[32]

There are thus two elements a listener needs to pick up on. One, the status of the first 10 seconds as an introduction. Two, the first riff as the message hidden in that introduction. Thus, phenomenologically, the gambit of this introduction is that a listener—perhaps even a first-time listener—will realize she has already heard the riff in reverse in the introduction. But for a potential first-time listener to catch on to this, our riff would need to be remembered and recognized even if it is heard only once, in retrograde; and second, represented by production clear enough to preserve the onsets of its pitches and rhythms even when played backward. The first may be credited to Morbid Angel, the latter to Morrisound Studios. Both the band and its engineers are put into the spotlight by backmasking's reputation for concealing forbidden knowledge—and its tendency to render familiar sounds near-unrecognizable.

How does the introduction differentiate itself from the song that follows it? The initial thing

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[32] Whether out of faithfulness to the recorded sound of the album or out of genuine confusion, one fan-created tablature of "Immortal Rites" even transcribes the introduction not as an exact inversion of the accurately transcribed first riff, but as something approximating its inverted sound. https://tabs.ultimate-guitar.com/tab/morbid-angel/immortal-rites-guitar-pro-1879553 (Accessed 8/7/2022)

that (re-)orients us is the snare hit, as the first non-reversed sound we heard. It functions like a wake-up call, a sniff of ammonia that breaks the listener out of her inverted daze. Example 7 shows an annotated spectrogram of the first twenty seconds of "Immortal Rites," visualizing the palindromic structure of the backmasked introduction and the riff it reverses, mirrored around the snare hit.[33] The impact of that snare is underscored by the reversed signal—the entire band—being muted completed, can be seen in the low frequencies present throughout the rest of the passage dropping out. Only the snare and faint tape noise remain.
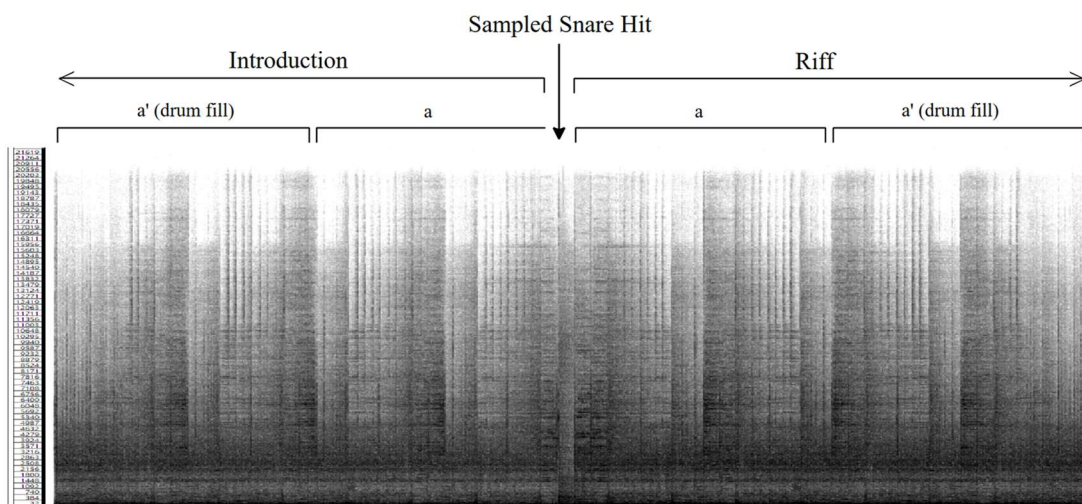
Example 7. Annotated spectrogram of Morbid Angel, "Immortal Rites," 0:00-0:20. The introduction of the track is its first riff, reversed on tape. Internal repetitions of the riff are marked with lowercase letters. The difference between a and a' is a drum fill that acts as a lead-in to the repetition of the riff.

Furthermore, the spectrogram shows the phenomenon pointed out by Kittler at the outset of this interlude. It thus visualizes the origins of the disorienting shuffling and subtly threatening hissing. In the backmasked introduction, transient attacks—the first energy spike in a sound or audio signal—now come after the decay. Since they are rich in high-frequency noise, they show up as thin black

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[33] The *Sonic Visualiser* settings are: Linear frequency scale, squared amplitude scale from white (lowest) to black (highest), normalized to view, window 2048, 75%.

columns that reach far up into the frequency range of the spectrogram. At the outer ends of the spectrogram a drum fill is visible. This and other tom runs are translated into quick shuffling, whereas the inversion of the metalworks—mostly the hi-hats—yield a hissing sound. Psychoacoustically, the attacks of specific sounds help listeners distinguish timbres as gestalts. When these attacks appear at the end or are omitted altogether, listeners struggle to orient themselves in the less-distinct decay phases of sound events.

But the inversion has another effect, also audible in the earlier Slayer introduction: the reversal of "join us" deemphasizes the symbolic dimension of speech, foregrounding the over-enunciated "s" sound. Since it cuts through duller environmental sounds, this consonant is often employed to draw attention or signal danger. A fellow concertgoer might warn me of impending social sanction with an insistent "psssst" if I disturb his idea of a proper listening experience. At the same time, cats and snakes will hiss in a last warning before attacking a perceived threat.[34] However, the shaping of timbre and dynamic envelopes is chiefly the domain of Morrisound's engineers—to which we will return in Chapter 3.

For now, I focus on the formal choices of the band that make the riff intelligible as the hidden content of the introduction—the poietics that make possible the poetics of this introduction. The riff would need to be repetitive enough to be memorable *and* contain enough contrast to have these repetitions stand out. Example 8 shows a transcription of the riff, highlighting *some* of the qualities that render it recognizable even when heard backward. It does not represent the sound as engineered by Morrisound. I prefer to think of it as representing *idealized actions* performed and rehearsed by the

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[34] According to recent research by Zachary Wallmark et al., listeners associate noisy timbres in general with high physical exertion and low valence body-affective states, such as anger and fear, a response that seems to be grounded in such an embodied motor component to timbre processing. Wallmark et al., "Embodied Listening and Timbre: Perceptual, Acoustical, and Neural Correlates."

band, not sounds. To convey the focus on actions on a fretboard, I transcribe bass and guitar parts as transposing instruments and include tabs, as these reveal what motions lie "close at hand" on the instruments.

A high degree of near-repetition aids the riff's memorability, with most of the variety coming down to minor modifications at the ends of its constituent parts. The riff's eight (transcribed) measures can be broken down into two four-measure units, distinguished only by the sixteenth-note drum fill on the toms the second time around. These units of four measures likewise are based on a two-measure model, again modified at the end, which is heard four times. The slight variations on this model give the listener a decent chance at recognizing the riff once she hears it again, this time forwards.

Example 8. Transcription of Morbid Angel, "Immortal Rites," 0:11-0:20. The 8-measure riff is highly self-similar; internal variety is created by modifying the endings of smaller units. Changing the end of a 2-measure unit yields a 4-measure unit, whose repetition is modified by a drum fill.

The beginning and end of the riff's two-measure model contrast strongly enough to make its repetition salient, with register, guitar technique, and the rhythmic interplay of the ensemble working in concord. The head of the riff sticks out as its highest point, with an A-B-flat-A slide adding microtonal coloring not heard elsewhere. This deviation from the grid of equal temperament is underscored by an octave-voicing (where the string between the two sounding ones is muted with a finger). For a brief moment,

all instruments share the same metric accents as the drum: the drum's simultaneous kick and crash hits initiate a half-time backbeat, with corresponding melodic changes in the guitars. However, this "parallel ensemble play"—which Dietmar Elflein has identified as a shared technique across metal music styles—is only maintained for one measure.[35] Then, the guitars play irregular groups of single notes and fifth power-chords that no longer coincide with the drum's backbeat. More standard groupings, such as eighth notes grouped in a diatonic 332 pattern, are conspicuously avoided.[36] The angular continuation, where guitars and drums go out of sync, helps hammer in the riff's head as a point of stable repose—while the jagged continuation establishes a back-and-forth distinct enough to be recognized in reverse.

The riff's memorable intricacy thus serves a dual purpose. On the one hand, it is a formal precondition of having this introduction be recognized as reverted, thus establishing a link to other backmasked introductions. By distilling a wealth of distinct gestures into a unit brief enough to be repeated four times in ten seconds, the band came up with a sounding shape that can feasibly be recognized when inverted. On the other hand, the riff's cramped complexity is also part of the message that is thus concealed. While it does not push the envelope of speed or ferocity like other tracks on *Altars of Madness*, the riff's winding contortions contrast notably with the rapid, but spacious riffs that form the backbone of songs in Venom's immediate successors—including Slayer. By featuring a refined but off-kilter riff in the place where a generic use of backmasking would contain some occult message, this introduction implies that what is genuinely twisted about Morbid Angel is their riff-craft.

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[35] Elflein, *Schwermetallanalysen. Die Musikalische Sprache Des Heavy Metal*, 114.

[36] Numerous theorists have referred to 3-3-2 and similar groupings as "diatonic rhythms" (since they, like the diatonic scale, represent a near-even division: the closest you can get to three equal pulses in 4/4). Importantly, this naming normalizes these patterns—which are common in African musics, as well as popular music traditions that trace their lineage back to the music of black Americans. Designating them as syncopations—displacements of a normative case—misrecognizes them, as ethnomusicologist John Rahn has forcefully argued. Rahn, "Turning the Analysis around: Africa-Derived Rhythms and Europe-Derived Music Theory." I cover how these rhythms function in grindcore in Chapter 4.

As sketched out before, Morbid Angel was proud of the odd twists and turns they had achieved—and considered themselves to have raised the bar, though it is not clear if the band intended to highlight this with the reversal of the riff. Azagthoth, Morbid Angel's lead guitarist and songwriter, recalls that when creating the album's riffs, he "wanted the feeling of going backwards or playing sideways and dragging," with challenging riffs that didn't defer to vocals. Vocalist and bass player David Vincent adds that during the writing of "Immortal Rites" in particular, the band consumed large quantities of marijuana—echoing John Lennon's assertion that such intoxication spurred him to include reversed sounds on *Revolver*.[37] Tom Morris, who engineered the album, was not able to recall who came up with the idea when I asked him:

> "That was a case of trying to find a way to intro the song. No one was happy with simply starting the song. I don't remember exactly who's idea it was. It would have been Dave [Vincent]'s, Trey [Azagthoth]'s or mine."[38]

This solution's feasibility was no doubt overdetermined—by the qualities of this particular riff, by Morbid Angel's interest in quasi-psychedelic explorations of the occult, by a batch of backmasked introductions in extreme metal, and by the cultural formations that turned the reversal of sound into a mask for the occult in the first place. Suspended in these networks, the puzzling beginning of "Immortal Rites" speaks clearly—even backward, not least due to the quality of Morrisound's production.

Making drums speak

Let me summarize how the backmasked introduction of "Immortal Rites" can be heard to showcase what Morbid Angel had achieved at Morrisound Studios. This aural spotlight depends on the complex

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[37] Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 89, 92.
[38] Email to the author, 11/8/2021.

interaction of cultural imaginary, generic convention, and musical-technical sophistication reconstructed in this interlude. Typically, backmasked introductions to extreme metal albums address themselves both to a naive public and a knowing metal audience. When bands like Slayer employ backmasking in their introductions, their horror-movie-inspired sound collages have an exoteric and esoteric meaning. On the one hand, they are cast to fit the anxious gaze of a public concerned about the corruption of its impressionable youth. On the other hand, the insiders of the metal scene will recognize the calculated provocation as a prop, while also recognizing its nods to earlier introductions by Venom. This being-in-on-the-joke draws the desired boundary between the mundane world and the world of metal, while performing historical and stylistic continuities within this world of records.

By addressing itself only to fellow metal insiders, Morbid Angel's introduction turns the provocation away from the ordinary world—and towards their peer bands in metal. While the reversed opening riff of Morbid Angel's "Immortal Rites" references other introductions that use backmasking to evoke sinister or Satanic subjects, it subverts these conventions—at least for insiders familiar with them. Traditionally, the content of backmasking in these introductions are words that evoke evil. By analogy, the introduction of "Immortal Rites" sends the message that it is the twisted sophistication of Morbid Angel's riffs—and the clarity of Morrisound's production—that is Satanic. This challenge resonates with the elitist attitude of the band at the time. In this sense, Morbid Angel's use of backmasking is purely esoteric: a display of self-assurance audible only to those who have followed the development of extreme metal in its introductions.

Morbid Angel could speak this provocation, wordlessly, by appropriating the *voice*—not the tone or speech—of these introductions. The voice, one of Lacan's partial objects, may be understood

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as the empty form that remains when all content has been stripped from speech.[39] Compared to Barthes' grain of the voice, Lacan's voice is decidedly less corporeal—a mere container, a vacuum that threatens to suck us in. Here, that empty container—the voice recognized regardless of what it speaks—is time, flowing backward. Backmasking is what lets this introduction refer to other introductions that also use it—but only if it is recognized as such.

But while Morbid Angel announces "Immortal Rites" with the voice of countless other introductions, the viability of this gambit was premised on the clarity of Morrisound's production. The reference backmasking makes to other introductions depends on a listener making the connection—recognizing that she is hearing a riff played in reverse before it is played forwards. For this recognition, clear enunciation matters—the drums have to spell out their hits so clearly that their onsets mark beginnings even when they follow their fading-to-nothingness. The introduction that anchors this interlude on introductions, then, not only issues death metal's challenge to what used to be extreme in metal—but it also showcases how Morrisound studios made death metal's formerly unruly drums speak clearly.

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[39] Mladen Dolar advocates for this understanding in Dolar, *A Voice and Nothing More*. For a critical reply, see Kane, "The Voice: A Diagnosis."

CHAPTER 3. HEARING THE DIGITAL DIVIDE

The archeology of the everyday can offer neither a complete reconstruction of the past nor a single authorial explanation for it. It only helps to interpret material ruins. […] Such ruins suggest incomplete narratives, poetic allegories, twisted plots of history; they never point to one single, straightforward script of events.
— Svetlana Boym, Common Places[1]

Traces that keep causing trouble

The audible diversity of approaches to metal drum production in the 1980s provokes both nostalgia and paranoid detective work. Fans will assert the use drum replacement on a record—or passionately dispute its presence to evoke an uncorrupted past. In the comment section of a popular upload of Kreator's 1986 LP *Pleasure to Kill,* a thread that begins with veneration—"oh,those 80's drums are incredible..."—quickly turns acrimonious: "Now days [sic] it seems like the drums (bass drum especially) sounds like a typewriter."[2] User Robin Andwaldt dissents, making a cautious case for technological intervention: "I'd agree, except for the Bass drums. You can barely hear them and they sound weak as hell, […]." User sikk fukken kunt[3] offers an insult—and suggests the playback system may be to blame: "the bass drums are perfectly audible. youre just mad because they dont have that stupid modern typewriter sound dont be a fukkin wimp, chances are you're just listening on something that sounds like shit." Doubling down, Robin Andwaldt suggests that convincing representation requires mediation: "I just think the drums are mixed like shit and sound like a mess. They don't sound like what they're supposed to portray […]." Someone interjects to question if the drums used in the studio were acoustic to begin with: "Afaik, the drums used on the recording of this album was electronic. Can someone confirm maybe?" Others continue to pile onto Robin Andtwaldt, offering a

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[1] Boym, *Common Places - Mythologies of Everyday Life in Russia*, 10.
[2] Comment section of YouTube "Kreator - Pleasure to Kill (1986)"
https://www.youtube.com/watch?v=JF0WduFBC68
[3] The "kk" styling is that associated with Sadistik Exekution's brand—as is the rudeness.

live performance as proof: "No mixed drums at all dumbie, there's a 86 kreator live here on youtube, Ventor [Kreator's drummer, author] used to play exactly like that […]" In the end, nostalgia has the final word: "Modern drums are a bunch of shit, and drummers too."

What underpins this controversy is the belief that different processes of capturing, enhancing, or reconstructing drum performances can be heard in the traces they leave on records—and that there is something at stake in knowing just how an extreme metal record was put together in the studio. For extreme metal, the ends don't necessarily justify the means. And in the 1980s, the means used in the production of popular music were in flux. Producers and engineers combined digital technologies with analog processes and devices, yielding a Babylonian variety of approaches, which Samantha Bennett terms "maverick methods."[4] This technological and methodological hybridity extended to metal, where the pursuit of new extremes posed the challenge of retaining the intelligibility of high-speed drum performances in the face of more and more distortion.

In Chapter 2, just before I pivoted to the question of value and labor, I sketched out a history of drum replacement and the "heaviness paradox" that makes it necessary. I also suggested that prior scholarship underestimates the importance of Morrisound's leadership in drum replacement. The tendency is to treat drum replacement in the analog-digital, pre-DAW era as trivial, even when the record and the records of the scene suggest it wasn't. The process behind Morrisound's drum replacement remains poorly understood. What material resistances had to be overcome to replace ultra-fast blast beats on analog tape with digital samples, years before the advent of the DAW cut-and-paste paradigm? And why did the sonic signature of this imperfectly perfect-sounding process prove so controversial? To answer these questions, Chapter 3 rewinds to an earlier point in Chapter 2 and

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[4] Bennett, *Modern Records, Maverick Methods: Technology and Process in Popular Music Record Production 1978-2000*, 10.

continues in a new direction. While I previously argued that drum replacement challenged death metal's values regardless of the specifics of its implementation, these specifics now become my concern—because they deeply concern the people who value this music.

In this chapter, I detail the processes and tools used to produce death (and other extreme) metal in the studio during the 1980s, the traces these particular methods and tools leave on records, and how a "hermeneutics of suspicion" continues to re-animate these tools and processes in the present—as a form of folk media archeology.[5] "In audio recordings, the forms of electronics make a difference," writes Wolfgang Ernst. The suspicious fans pursuing traces of drum replacement would agree. If media archeology is defined by questioning the sound of tradition by probing the "delays and manipulations of the time axis" that make its sounds repeatable, fans of extreme metal *are* folk media archeologists.[6] This persistent interest also creates the archive I use to reconstruct the analog-digital assemblage used by Morrisound Studios. The linchpin of Morrisound's process was the use of samples, which helped balance fast, high-impact drums with saturated distorted guitars in the mix—and could rescue flawed takes, all within modest budgets. But to achieve this sample deployment in the 1980s, engineers had to coordinate human, analog, and digital time—a feat that gave Morrisound and their customers a brief, but crucial technological edge. Owing both to convention and technological limitation, these early instances of drum replacement are marked by audible asynchrony and veer between the hyperreal and the surreal.

Understanding this watershed in the sound of extreme metal is key to accounting for its differentiation into sub-genres. Morrisound's sonic signature, itself marked by temporal misalignments, made global inequalities hard to overhear. It forced different factions of the

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[5] Ricoeur, *Freud and Philosophy: An Essay on Interpretation*, 33–35.
[6] Ernst, *Sonic Time Machines: Explicit Sound, Sirenic Voices, and Implicit Sonicity*, 24.

differentiating metal underground to reckon with asynchrony on a larger, political scale. As scholars like Jan-Peter Herbst have pointed out, studio productions not just working spaces, but also real and imagined geographic spaces.[7] While local sounds and production paradigms have been researched in metal studies and the musicology of record production, the traces of different recording processes also registered global inequalities. To those unable to access it, the signature of Morrisound's imperfect digital perfection could sound imperialist. Responses ranged from more-or-less grudging submission to outright rebellion.[8] These struggles with the hardwired limits of and access to novel technologies underpin the creation of the archive that allows extreme metal records to speak to their creation today.

Compared to earlier chapters, the analysis of recordings and studio processes now takes center stage. However, temporality and its material mediation continue to unify the different scales of my inquiry. To this end, this chapter's theoretical framework combines the musicology of record production with more speculative German media theory. I grasp the micro-temporal frictions between analog and digital media using Wolfgang Ernst's concept of time-criticality; Sybille Krämer's epistemology supplements this by allowing me to grasp recorded traces as the origin of narratives. Throughout, my evidence is eclectic: to supplement existing interviews and documents, I conducted an email interview with Morrisound's Tom Morris. I also draw on manuals, spec sheets, and other technical characteristics of the devices used, in addition to close listening of records.

First, I recapitulate the history of failed death metal productions to illustrate the need met by Morrisound Studios, going on to detail how one album advertised the studio's solution—and forecast the future of drum processing. Second, I give an initial sketch of Morrisound's analog-digital drum

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[7] Herbst, "Metronomic Precision of 'Teutonic Metal' - A Methodological Challenge for Rhythm and Performance Research."

[8] The most famous example being Norwegian black metal, which I re-examine not as a return to analog practices, but a post-digital style.

replacement process, including advantages, drawbacks, and specific use cases. Third, I deepen the discussion of process, intention, and trace on records in a case study that investigates how the split recent of Morbid Angel's *Blessed are the Sick* led to detailed documentation of its studio process. Finally, I sketch the alternatives to and dependencies on Morrisound's process. While there were viable analog and analog-digital alternatives, these entailed drawbacks of their own—and reflected global inequalities, giving an existential edge to the Morrisound sound. That sound's success was also it's undoing: once studios forced bands to record elsewhere, some death metal bands found out that they could not achieve what they had come to consider "their" sound elsewhere. Understanding this moment, when the audible traces of a studio process came to signify these asymmetries, prepares us to evaluate the retrofittings and counterprograms that followed in its wake.

Pre-digital engineering woes

Morrisound's process and sonic signature met a need that aspiring death metal bands felt acutely. Up to this point, death metal albums were often beset by difficulties in the studio. The turning point was Death's *Leprosy*, released in 1988, and Scott Burns' first major engineering credit. While not the first metal album to use sample drum replacement, the album is often cited as the template that drew bands to Morrisound. It offered both a solution to the "heaviness paradox" as it presented itself in the 1980s, but, in retrospect, also prefigured the mechanical and artificial "typewriter drums" of the present.

Death metal's false starts before Morrisound

The unprecedented intensity of death metal drumming challenged engineers. As a result, several albums were delayed or canceled altogether. In other cases, death metal bands would resort to studios and producers whose signature sounds were already associated with earlier subgenres, muddling the distinction between death metal and thrash metal, for example.

A case in point for the tech-processual and subgeneric confusion that death metal faced in the 1980s is Death's 1987 debut album, *Scream Bloody Gore.* Initial recording sessions in Florida never progressed beyond rhythm tracks consisting of drums and guitar, since the label disapproved of the results, as drummer Chris Reifert recalls.[9] The album was then re-recorded in Los Angeles under the supervision of Randy Burns, who had worked extensively with the local punk and thrash metal scene. Among the other Burns' credits numbered Possessed's *Seven Churches*, an important influence on death metal. Aurally, *Scream Bloody Gore* resembles medium-budget thrash metal productions of the time. Reasonably clear, with plenty of ambiance, not-quite-huge-sounding guitars, and a hollow kick drum sound that threatens to disappear in the mix.[10] This legacy production had ramifications for how listeners perceived Death's subgenre. In a contemporaneous review, influential German fanzine *Thrasher Mag #4* complains that *Scream Bloody Gore* sounds exactly like the thrash metal of Possessed—and constituted a disappointing step back from Death's more intense demo offerings.[11] But once Morrisound's distinct signature became a known quantity, however, production blurring the lines between thrash and death metal also worked in the other direction. Exhorder, a thrash metal outfit of older vintage, recorded *Slaughter in the Vatican* at Morrisound. But due to the presence of the studio's signature sound—including a bitingly insistent, clearly sampled snare drum—the band was conflated with the newer roster of death metal bands.[12]

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[9] Like many other artifacts of this conflicted transition period, these sessions would later be reissued—with linear notes explaining their genesis. Death, *Scream Bloody Gore (Reissue)*.

[10] Scott Hull recounts that these early efforts of Death and Possessed did not play well with his friends, in language that suggests production was partly to blame for the lack of impact: "[…] at the time, for the average metalhead, in comparison to bands like Metallica and Anthrax it sounded really rough, poorly executed, and shitty. […] the drum fills were just shitty, and it came across like a bunch of kids trying to be as evil as possible." Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 18%.

[11] Thrasher-Mag-Redaktion, "Thrasher Mag #4," 35.

[12] Ben Falgoust: "Then there was Exhorder, who existed before the whole death metal explosion, and had roots more in thrash and speed metal. Today, looking back, I would not really compare them to death metal at all. I think it was the Morrisound production they got that sort of lumped them in with all the other bands on Roadrunner that were going to Morrisound." Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 30%. Exhorder, *Slaughter in the*

Yet while *Scream Bloody Gore* was released, drum mixing was even more of a challenge for other releases—like Morbid Angel's first studio effort. Due to the challenge of performing and recording the blast beat, this potential contender for the first death metal album ever was not released at all. Morbid Angel recorded a full-length studio album in 1986, three years before the release of the breakthrough success *Altars of Madness*, with a slightly different lineup. It was recorded at a professional 24-track studio that specialized in country music, yet both the band and the studio personnel were lacking in know-how.[13] Dissatisfied with the outcome, the band decided to shelve it, although their label Earache Records released it as *Abominations of Desolation* in 1991 against the band's wishes.[14]

Speaking of the scrapped debut album, guitarist Trey Azagthoth says he "didn't really feel that the drumming was fitting in, and it was kinda hard to tell at the practice because the practice space was kinda noisy. But once we recorded it, it seemed like it was missing stuff."[15] Azagthoth does not distinguish between issues of clarity in the mix and the performance of then-drummer Mike Browning. Almost all of the songs featured on Abominations were later re-recorded. While guitar riffs and the form of the songs remained largely the same, there are notable differences between Browning's and Sandoval's performance of the drum parts. For example, in the blast beat passage "Chapel of Ghouls" (1:35-1:49 on Altars, 3:26-3:42 on Abominations, where the track includes the intro), Browning appears to use a simpler pattern. Instead of a kick-snare alternation, kick and hi-hat are played at approximately the same time.[16] Appears, I write, since the metalwork of the kit drowns out the attacks

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Vatican.

[13] "MORBID ANGEL."

[14] Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 73–74.

[15] Mudrian, 73–74.

[16] Even when they were re-recorded by Sandoval at Morrisound, the drum tracks on "Chapel of Ghouls" appear to have been particularly challenging to mix, as the studio might have still been finding its footing. The 1994 re-issue CD of Altars of Madness contains alternate mixes of "Chapel of Ghouls" and two other tracks that feature similarly fast blast beat passages. The most notable difference is the diverging prominence granted to the snare, with the re-mixes featuring a snare that is less "dry" and higher in the mix.

of the snare and the kick is altogether too feeble to cut through the guitar buzz. As far as the sphere outside of the Florida scene was concerned, only the blast beasts on record mattered, which cemented the studio's sonic signature as central to death metal's dissemination.

Leprosy as Morrisound's calling card…

The release of *Leprosy* in August 1988 left a tremendous impression on the scene and established Morrisound and Scott Burns as the go-to destination for death metal bands. The album's sound balanced guitars and drums in a way that had eluded earlier efforts. Produced by Dan Johnson, and engineered by then-intern and soon-death-metal-main-guy Scott Burns, *Leprosy* "featured the heaviest, most in-your-face bass drum sound that had ever been recorded," to quote a drummer who moved to Tampa after hearing the album.[17] Strictly speaking, *recording* was not its secret: it was the use of samples in the mixing processes, a technique Burns learned from Morrisound's other engineers and adapted to death metal. Were it not for its digitally reinforced pummeling, the album likely would not have impressed as much. Compared to Death's demos and even their debut *Scream Bloody Gore*, the sophomore album *Leprosy* was slower and notably steadier in tempo.

The deployment of samples allowed for an unparalleled balance between guitar and drums, one that promised a way out of the production quagmire death metal had been stuck in—the "heaviness paradox." While *Leprosy* was not the first Morrisound Production to feature sample drum replacement, the pervasive and conspicuous evenness of its drums made it a showcase for the studio and also features prominently in the memory of the scene. Prolific death metal drummer Tony Laureano explains the benefits of drum sampling and *Leprosy*'s role in popularizing its use and, by extension, Morrisound and Scott Burns as its trusted suppliers:

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[17] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 30%.

Drum sampling is the procedure of recording a single hit from any given drum, and then replacing the recorded sound with the sampled sound to create a solid, consistent hit for every time that drum is played. This was largely spearheaded by Scott Burns […] While it had been used in other genres, and even on some metal records to a certain degree, Scott Burns just took it to another level. He first used this when he engineered Death's amazing second album *Leprosy*, and even though he didn't produce that record—his first solo recording was Obituary's *Slowly We Rot*—he still managed to leave what would become one of his major stamps on the album. […] It was the sound that defined a generation, and a principle still being used to this day. [18]

The challenge for death metal was having both drums and guitars occupy as much space as possible. But, as Jim Morris pithily put it, the perception of sonic size is relative: "[I]f everything is huge, then nothing is huge."[19] In virtually all earlier death metal productions, something had to give—either the guitars, or the drums. The clarity of *Leprosy*'s drum sound promised to solve that conundrum, even if achieved at the price of verisimilitude.

Influential as it was, *Leprosy*'s drum production also has its detractors, who decry its tempo and dynamics as unnaturally even. One of the few scholars to note Leprosy's pioneering use of samples, Natalie Purcell captures the uncanny precision of this effect when she writes that "kick drum was replaced with drum triggers to produce an entirely uniform beat."[20] The concern about uniformity is widespread and not constrained to the kick drum. Overall, fan reviews on the *Encyclopedia Metallum*, one of the most important archives and gatekeeping institutions in metal, praise *Leprosy* as a classic and recount its influence. But a large number of negative remarks coalesce around the drumming's monotony, the snare being singled out as overly present in the mix by a larger number of reviews—

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[18] Netherton, 54%.
[19] Netherton, 43%.
[20] Here, Purcell uses "drum triggers" as a stand-in for all varieties of sample drum replacement and reinforcement. This conflation is common parlance among death metal drummers and fans alike, while engineers and producers are usually keener to distinguish them. More specifically, drum triggers are contact microphones that can be used to trigger samples—be it live, or in the studio. They were, however, not used in Morrisound's initial process.
Purcell, *Death Metal: The Passion and Politics of a Subculture*, Origins.

occasionally, with downright artful insults. One representative criticism reads: "[Bill Andrews i]s decent in the midtempo section but uptempo he resorts to the same old polka beat over and over without any nuances or bassdrum accents. The production of his snaredrum didn't do his style any good either."[21] While many fans attribute these shortcomings directly to Andrews, Death's drummer at the time, his performances on rehearsal and live recordings from the *Leprosy* period, recently released on a reissue of the album, show a different picture. This suggests Morrisound's studio process demanded some concessions in tempo and complexity, at least before the process matured.

Example 9 compares the *Leprosy* studio version of the song "Pull the Plug" with a rehearsal recording, showing characteristic simplifications that parallel those in other songs. The rehearsal version of "Pull the Plug" is significantly faster than that found on *Leprosy*'s famed studio version. Andrews also performs frequent and varied snare fills and cymbal accents. A common gesture in extreme metal, these flourishes mark the boundaries of riffs (or sub-riff phrases) and help the other band members orient themselves. This becomes particularly important at high speeds—pointing to another difference between the two versions. In the rehearsal recording, the band pushes drummer Andrews' kick-snare alternation close to breakneck blast beat speed. The studio version's more restrained pace suggests the less prestigious legacy "skank" or "Slayer" beat, described in Chapter 2. Steadiness differs, too.

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[21] Other reviewers strike similar notes. "This guy can't seem to leave his fucking snare alone. He's always producing the same redundant, boring garbage... especially on the fast parts!" / "The guitars are heavy. The drums are loud and the snare is extremely loud" / "Whoever mixed the drum tracks at Morrisound Recording put way, way to much power to the snare drum of Bill Andrews." / "These snares are Department Of Defense-approved oil drums sealed with the carcasses of caught KGB spies boiling in necro-nuclear waste. As cool as that description sounds, it only means that these snares sound overly loud and mechanical." / "I don't really like the monotonous drumming of Andrews, who especially in the faster parts seem to be playing the same patterns over and over again. […] More so, the snare drum sound is almost annoying sometimes, but I can live with that"
"Death - Leprosy - Reviews - Encyclopaedia Metallum: The Metal Archives." Notably, however, there is no mention of sampling or drum replacement in this review section—a contrast with *Blessed are the Sick*, which I analyze below.

Example 9. Transcription of two versions of Death, "Pull the Plug." *Leprosy* studio version (above, 1:40-1:54), and rehearsal from 12/05/1987, (below, 1:37-1:50), both from the 2016 Relapse Records reissue.

While the transcription does justice to the dynamic and rhythmic evenness of the studio version, the live version's tenuous alignment of drums and guitars escapes this symbolic grid. Due to an inaudible kick drum, the snare floats ungrounded between the accents of the riff. In waves, Andrews' drumming rejoins the guitars only at higher-order metrical seams. In the live version, additional crash cymbal hits and snare fills mark these points of convergence. The studio version, lacking those flourishes, sounds stolid and minimalist by comparison. The simplification of the drum part—the price paid for clarity— may have been a concession to Scott Burns' limited experience with the drum replacement processes I detail below.

The behavior of the snare and kick differentiates the *Leprosy* version and its raw rehearsal sibling. It also prefigures a controversial phenomenon in death metal drumming's digital future. On the studio recording, the two drums sound more alike and consistent than their physical counterparts ever could. This suggests heavy sample reinforcement or outright replacement in both drums, with dynamics processing of the samples accounting for the uncanny resemblance. By sculpting the spectral envelope of a bass drum sample, its timbre can be brought closer to the envelope of a smaller drum: a sharp transient and no excessive resonance. And a snare, which normally would decay quickly, can be extended in time—bringing it closer to its bass drum complement. When the physical properties of the drum are circumvented to an extreme degree, the result doesn't just sound mechanical (as reviews of *Leprosy* noted) but can suggest a wholly different mechanism.

This phenomenal breakdown has a name: typewriter drums. Example 10 compares spectrograms of the transcribed passage from "Pull the Plug," but also includes some seconds of the preceding half-time riff. The superior clarity of the studio version (above) is evident. Higher frequencies are present, in particular in the kick-drum transients and the extended snare decay. In the rehearsal version, the pulse becomes impossible to visually identify, especially once the pace picks up. With its conspicuous use of dynamically processed samples and near-metronomic timing, *Leprosy* anticipates later excesses, even if it solved earlier problems.

↓ First kick drum hit of transcription
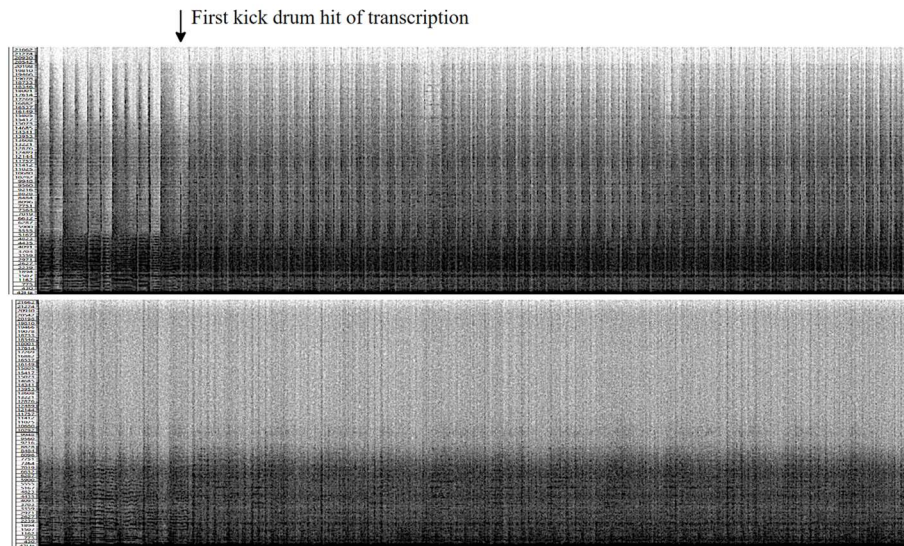
Example 10. Spectrograms of the two versions of Death, "Pull the Plug." They begin a few seconds earlier with the preceding half-time riff. On the sample-enhanced album version, the kick drum's initial attack is exaggerated, while the snare receives additional and visibly consistent sustain.

The epithet "typewriter drums" is a complex analogy that draws its power from tapping into our intuitions about the sources of particular sounds—and what happens when studio intervention confounds our embodied experience with the physical world. Analyzing the drum-to-typewriter mappings of this insult illustrates how processing meant to enhance heaviness by increasing clarity can undermine heaviness instead.[22] The analogy is intuitive because typewriters and kick drums resemble each other. Both possess a mallet-like lever that strikes a flat surface, producing a sound. Similar motions produce the sounds—but the sound differs due to the respective size and materials. The typewriter's hammer travels a short path, and its metallic click decays rapidly in absent a hollow resonant body. The bass drum's larger mallet strikes a hollow drum that produces a more sustained, low-frequency-rich sound. And yet, dynamically processed to resemble each other—like noteheads on

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[22] For an in-depth discussion of how analogical reasoning is foundational to uniquely human abstract thought in general, and the cognition of music in particular, see Zbikowski, *Foundations of Musical Grammar*, 28ff.

a score—and perfectly repeated by samples, this physical difference collapses in our perception of the finished record. This troubles what Dennis Smalley has called "source bonding," our "natural tendency to relate sounds to supposed sources and causes."[23]

And this breakdown of source bonding troubles hearing typewriter drums as masculine and athletic, as death metal liked to hear them. While excessively processed drums might have an easier time cutting through slabs of distorted guitar, they tend to suggest hearing a tiny contraption up close: a typewriter, which, as an icon of quotidian life, is metal only in terms of its materiality. Worse still, a typewriter is indifferent to the physiognomy of handwriting, it renders writing anonymous: no virtuoso signatures, just typescript. Kittler noted that the introduction of the typewriter challenged the male exclusivity of authorship and inverted "the gender of writing."[24] And when the word "typewriter drums" is wielded as a weapon against the use of samples, the fear of emasculation lingers.

To summarize this section, a lack of reliable production in the studio held back death metal albums—or held back these albums from being perceived as death metal. Death's *Leprosy*, the first high-profile death metal album produced at Morrisound, was the lodestar that pointed beyond this quandary. With the use of dynamically processed samples, the kick and snare drum could cut through full-sounding distorted guitars. But this sometimes strains listeners' intuitions about the physical behavior of these drums, anticipating the breakdown of perceived size implied by "typewriter drums." But this informal theory of the heaviness paradox does not account for the difficulties of implementing sample drum replacement in the 1980s, in particular in a subgenre like death metal, where small subdivisions strained the response time of early digital equipment.

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[23] Smalley, "'Spectromorphology: Explaining Sound-Shapes,'" 110.
[24] Kittler, *Gramophone, Film, Typewriter*, 183. Thanks to Andrei Pohorelsky for reminding me of Kittler's argument.

In the next section, I establish a more formal theory of process in the studio, intentional sonic signatures on records, and the unintended traces that can emerge between the agency of sound engineers and their equipment.

Tracing Morrisound's signature

In this section, I develop a framework for relating the sounds of records to the process of creating them in the studio, a formal equivalent the detective work done by fans, an example of which I presented in the introduction. Process, signature, and trace: going ahead, this conceptual triad will help parse how records like *Leprosy* are created, as well as how the sounding results of the studio process vacillate between signatures or traces left by accident. This section also offers a short primer on what the different stages of the studio process entail. With these distinctions in place, I perform an initial autopsy of the two main methods of sample drum replacement used by Morrisound. I outline the stated aims of these analog-digital processes and the challenges of implementing them with the technology available to Morrisound.

Intention and outcome in the studio

The conspicuous sounds of Morrisound's solution drew attention to the studio's process. In this sense, Morrisound's drum sample replacement is a "digital signature." For Ragnhild Brøvig-Hanssen and Anne Danielsen, "digital signatures encompass the sonically distinctive character of digital mediation," in so far as they reveal themselves to the listener, making them instances of opaque mediation. While they insist on the *experiential* understanding, Brøvig-Hanssen and Danielsen also touch on the *intentional* creative perspective: "If one's production ideal is opaque mediation, then technology will be used in a manner that forces the listener to reckon with it."[25] Critical listening reconstructs

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[25] Brøvig-Hanssen and Danielsen, *Digital Signatures: The Impact of Digitization on Popular Music Sound*, 5–6.

intentions, just as the creative process in the studio must anticipate listeners. Or, to use the terminology of Jean-Jacques Nattiez, even if the *poietic* process of Morrisound misconstrued in *esthetic* reception by listeners, it is still posited, so long as there is some awareness of where the trace being analyzed came from.[26]

However, I will use "signature" and "trace" in a more restricted way. Just like your intent to submit to a contract is part of your signature, the "sonic signature" of Steve Albini is defined, in part, by his intentions. Though he considers himself a self-effacing engineer and not an assertive producer, Albini champions the use of analog tape and process—and will let anyone know that he detests digital audio technology.[27] This intention is an excess beyond the material presence of tell-tale analog traces— which, ironically, are mostly consumed on digital media today. But this excess is part of the signature, of how this signature is heard. If Albini's involvement is known, tape hiss or the soft clipping of analog equipment will be heard as authorized by his intention. Hiss and clipping, of course, are material indices of specific equipment: they suggest particular causes, independent of intention that may be inferred through symbolic links, but they are not what I will designate as traces—which have a cognitive component, just like signatures. Following Sybille Krämer, I will define sonic traces as phenomena that are read, but not written. A trace is not a signature or an interpellation, but rather an accident "that must be caused but cannot be intended."[28] However, since "every effect can at the same time be considered a sign of its cause," traces can be taken as signs by those who pursue them and reconstruct their causes.[29]

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[26] Nattiez, *Music and Discourse: Toward a Semiology of Music*, 16.
[27] Bennett, *Modern Records, Maverick Methods: Technology and Process in Popular Music Record Production 1978-2000*, 132.
[28] Krämer, *Medium, Messenger, Transmission: An Approach to Media Philosophy*, 176.
[29] Hodgson, *Understanding Records: A Field Guide to Recording Practice*.

To locate signatures and traces, I will need an account of where intention and accident may occur in the studio process. Although the studio process constitutes the "dominant musical language of popular music communications," writes Jay Hodgson, "that language remains a total mystery to most listeners."[30] In part, this is not surprising: it's complex engineering. Even if we simplify the process by focusing only on the perspective of the producer—the "nexus" of a record's creation, as Mike Howlett put it—countless constraints and collaborations impose themselves: economic expediency and budgets, the expectations and various contributions of musicians, the available equipment itself and how it is used.[31]

In tactically simplifying the complexity of collaboration, I follow Simon Zagorski-Thomas, who has proposed using embodied cognition to integrate theories of human-technology interaction. These technologies distribute agency between society, individuals, and technological artifacts in distinct ways. This plurality is an asset, not a liability.[32] The systems approach to creativity, for example, grasps creativity as based on inherited social norms and the feedback of gatekeepers; the social construction of technology (SCOT) asks how different groups frame technology as serving or not serving their needs; finally, actor-network theory (ANT), with its flat ontology of actors, best models how the complexity of a network leads to effects beyond intention. These models parallel the schematic representations that actors in the studio have of their goals and how to achieve them, which are mediated—not exclusively, but significantly—by verbal communication in the studio, which allows actors to align their purposes and create conceptual spaces that structure their activity.

One way to unify these *esthetic* and *poietic* dimensions of records is to investigate the analogies

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[30] Hodgson.
[31] Zagorski-Thomas, *The Musicology of Record Production*, 156.
[32] Zagorski-Thomas, 156.

used by listeners, producers, and sound engineers from the perspective of embodied cognition. A growing body of research in music theory and record production draws on this recent paradigm in cognitive science, which considers bodily capabilities and environmental feedback an essential part of cognitive processing.[33] The theoretical literature underpinning this growing body of research offers a staggering variety of terms: image schemata, scripts, frames, and many more. The underlying principle is that cognition and categorization are conceived of as based on the perception of invariant properties that derive from our embodied interaction with our environment, yielding simplified representations that can be combined through analogy to apprehend new situations and solve problems—a process known as "conceptual blending."[34] To recall our previous example of the "typewriter drum" epithet, this conceptual blend draws on our familiarity with the sounds of a small mechanical device to conceptualize the aural impression of over-processed drums. The meaning created by this mapping is that this sound is small and out of place. Typewriters are not typically part of a metal ensemble.

The most basic terms used to describe and guide the production of a record include similar mappings. These provide a generic background against which I will assess more specific framings used by Morrisound's engineers below. Consider what is implied when "recording" stands in for the entire studio process. This analogy explains the unfamiliar studio process in terms of what could be experienced on a consumer tape deck. But, as Evan Eisenberg quipped, "studio recordings [...] record

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[33] Following the field-defining Zbikowski, *Conceptualizing Music: Cognitive Structure, Theory, and Analysis*, *some* major monographs grounded in embodied cognition are Leman, *Embodied Music Cognition and Mediation Technology*. Zbikowski, *Foundations of Musical Grammar*. Cox, *Music and Embodied Cognition*. Zbikowski, *Foundations of Musical Grammar*. De Souza, "Sounding Actions." Kozak, *Enacting Musical Time: The Bodily Experience of New Music*.

[34] Following Lawrence Zbikowski's synthesis of the source research, conceptual blending derives from research on human problem solving: a familiar source domain provides the solution to an unfamiliar target domain, once shared properties—an induced schema—maps the known onto the new. In the terminology of Gilles Fauconnier and Mark Turner, the three mental spaces, which are constructed locally and transiently in discourse and action, give rise to an emergent fourth mental space. This emergent creation of meaning is conceptual blending, which explains how generic dynamic processes in music, by virtue of their analogy with familiar dynamic processes, acquire a specificity of meaning not inherent in either. Zbikowski, *Foundations of Musical Grammar*, 48.

nothing. Pieced together from bits of actual events, they construct an ideal event."[35] Rather than capturing a performance in continuous space and time, the studio process re-combines and re-inscribes sounds that never occurred together. From this *poietic* perspective, Albin Zak disputes that records present "ideal" performances. Instead, the studio process itself is an event in its own right, where countless moments of critical listening iteration transform the very way musicians play—even prior to any processing. According to Zak, there is no original intention or performance that is "realized" in the studio.[36] Yet from the *esthetic* perspective of reception (after all, records are made to be heard), there are good reasons to regard the product of the studio process as a "representation" of a performance nonetheless, albeit a constructed one. Understanding sounds in terms of familiar physical sources is deeply embedded into our cognition and metal's generic norms merely double down on this propensity.

While in much of popular music, just what a producer can be nebulous, in most varieties of metal music, the expectations are clear: document and enhance.[37] A producer (who, in smaller productions, may also be the only engineer) ought to represent the songwriting and playing of the band in the best possible light, but without calling the band's sole authorship into question—in other words, the ideal is an engineer who merely facilitates.[38] But, to cycle back to the "heaviness paradox."

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[35] Eisenberg, *The Recording Angel: Music, Records, and Culture from Aristotle to Zappa*, 109.

[36] Zak, *The Poetics of Rock: Cutting Tracks, Making Records*, 130–31.

[37] The role of the producer was always that of a mediator, an in-between. Initially, the role of the producer was unrelated to managing the complex ensemble of humans and technologies that makes up a studio; the producer's duties were an extension of A&R: managing time and budgets. As the moving parts of the studio process increased, new forms of leadership were called for—giving birth to modern types of the producer, which still exhibit considerable diversity, from auteur-engineers to hands-off facilitators. Zagorski-Thomas, *The Musicology of Record Production*, 160. While early scholarship on production foregrounded the "recordist as auteur," following film theory, recent work in the musicology of record production has foregrounded collaboration and facilitator-types. Bennett, *Modern Records, Maverick Methods: Technology and Process in Popular Music Record Production 1978-2000*, 103.

[38] This attitude is congruent with the "rockist" strain of criticism and may be contrasted with the "poptimist" attitude that views a creative division of labor between musicians and producer(s) more positively. Producers that significantly contribute to songs - think George Martin writing string-quartet parts for the Beatles - are not desirable in metal. Instead, the ideal production and engineering of a metal albums falls along the opposite side of a spectrum initially

If you can't make out what the drummer is playing, all the virtuosity is for naught, so in order to represent extremes, fidelity has to be sacrificed for intelligibility. In Chapter 2, I argued that little-edited demo tapes served as certificates of what a band could do, which points to another difference in the understanding of the studio process. Outside of metal, demo versions of songs are often only skeletons, a blueprint for collaborative elaboration in the studio: sections and new instrumental parts may be added, and a singer-plus-piano demo may flower into a quasi-orchestral track. In metal music, on the other hand, songwriting takes place prior to entering the studio. In the demo and studio version of Death's "Pull the Plug," the succession of riffs and number of instrumental parts is identical. Since the instrumentation of death metal (and, indeed, most styles of metal) is so standardized, the timbral and rhythmic surplus added by the studio process gains salience—as do minor changes in the represented performance.

Understanding where these interventions happen—and how leadership and collaboration manifest—requires us to segment the studio process. Typically, practitioners and engineers distinguish between tracking, signal processing, mixing, and mastering. Mynett highlights the importance of pre-production for metal: getting a sense of the band's style, managing expectations, and planning for successful—that is, limited—time in the studio.[39] Tracking captures the performances that form the raw material for the later stages. This may involve microphones that transduce vibrating air (or surfaces) into an electrical signal (or digital information) or having a sequencer output samples. So long as it produces tracks that are used in later stages, it is tracking. Signal processing involves critically listening to and molding these tracks. For example, unwanted noise may be reduced, and desired

formulated by 1960s R'n'B producer Jerry Wexler. The expectation is to document and enhance. Zak, *The Poetics of Rock: Cutting Tracks, Making Records*, 177.
[39] Mynett, *Metal Music Manual*, 25.

frequencies may be boosted. At this stage, changes are made to individual parts of a multi-track project. Mixing is the stage that combines the constituent tracks into a well-balanced whole: a "past-tense aural narrative," as Hodgson terms it.[40] At this point, each part's spatial location in the "sound stage" is fixed.[41] This sequence and segmenting is ideal and does not necessarily hold in practice.[42] Nonetheless, being able to refer to "earlier" and "later" stages, defined by particular aims achieved with particular technologies, is key to coordinating the studio process.

Real-time and programmed processes

The distinction between tracking, signal processing, and mixing has ramifications for understanding the methods and aims of Morrisound Studio's engineers—and why its sounding results could prove so controversial. I now explore Morrisound's two distinct processes for drum replacement, as well as the metaphors its engineers use to describe their goals in using these processes. To represent the diversity of viewpoints in the studio, I supplement an existing dialog between Jim Morris and Scott Burns with an interview I conducted with Tom Morris.

Morrisound developed two distinct processes for sample-based drum replacement. One method uses a sequencer to trigger samples onto tape, thus creating partial performances from scratch. The other method, an automated re-performance, uses a tracked performance to trigger samples onto a new reel. I will call the former process "sequenced samples," and the latter "track-triggered samples." Each process had distinct use cases and faced different challenges, they both served a common purpose: intelligibility and impact. In the words of Jim Morris, "the trick was to get all of the drums to 'speak'."[43]

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[40] Hodgson, *Understanding Records: A Field Guide to Recording Practice*, 154.
[41] Moylan, "Considering Space in Recorded Music."
[42] The choice and placement of microphones, for example, "processes" the resultant signals by virtue of different microphones being biased towards certain frequencies, while the placement adds or reduces room reverberation that will then influence the final mix. Hodgson, *Understanding Records: A Field Guide to Recording Practice*, xii.
[43] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 45%.

This common metaphor focuses on what makes verbal delivery intelligible to listeners familiar with the sounds and symbolic associations of a language: clarity of enunciation. But this metaphor doesn't merely express a desired outcome in the final mix, it also posits the raw material, the performances and intentions of a band as a text to be "read" by engineers and then edited and/or enunciated for clarity.

As mentioned before, a main requirement for this clarity was dynamic consistency, which compensated for drummers not being able to produce equally powerful hits during fast sections: "[…] prior to adding samples to the mix, it was difficult to have the 'blast beat' sections of the drum tracks as loud as the slower sections. It is simply impossible for drummers to play that hard, that fast for that long."[44] But in the case of sequencing samples to correct a flawed take, engineers had to make calls on what was supposed to be represented, taking an editorial role. Since Morrisound's sample-based drum replacement could be implemented independently from tracking—somewhere between tracking and mixing—this means that it could be done without the band being present as critical listeners, or applied to recordings tracked elsewhere. The unique blending of microphone-recorded tracks and samples distinguishes Morrisound's approach from analog and other analog-digital competitors, offering unique potential for control of the mix and correction of flawed tracks—a positive signature, endorsed and sought after.

But Morrisound's engineers disagree on whether drum replacement was primarily used to remedy performances or to increase control over the mix. Netherton's *Extremity Retained* started a debate between Morrisound's engineers. Jim Morris, in the passage I quoted in Chapter 2, emphasizes the need for correction and even anticipating intentions, suggesting that while drummers "had the vision in their head and they knew what the music was supposed to be about," these intentions had to

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[44] Tom Morris, interview with the author.

be interpreted and articulated when drummers came into the studio "unable to perform their own songs."[45] Confronted with Jim Morris's comments on a podcast, Scott Burns asserts control over the mix motivated him more than anything else, as it allowed drum sounds to be dynamically processed in isolation, without amplifying other sounds picked up by the microphone.[46] Pressed on it by the host, Burns concedes "some guys needed help" due to the demand for extreme speed. These differences in values also manifest in the analogies made. Unlike Jim Morris's performance-as-text metaphor of "make drums speak," Burns' visual framing "we wanted to see if he really did it, right?" (quoted in Chapter 2) implies transmission of a drastic, embodied, and singular event, not reading intentions.[47] The different goals of correction and control map onto the two processes: to re-construct mangled passages, sequencing was needed, while track-triggered samples could compensate for dynamic fluctuations, but not inconsistencies in timing or outright playing mistakes. If anything, the latter's unyielding dynamic reinforcement set these imperfections into relief—traces that exceed the desired signature and, unlike the vouched-for result, attract discursive scrutiny.

To understand why these processes meant to produce a signature were also liable to produce irritating traces, we need to understand the capabilities and limits of the tools at Morrisound's disposal. These reflect the hybrid conditions of the protracted analog-digital transition during the 1980s.

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[45] Quoted in Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 45%. Other engineers also recall having to guess what drummers meant to play when implementing drum replacement. User dbbubba, on the infamous forum gearspace.com, writes: "My problem was never the kick drums, but the snare and toms. When guy would ply that 100 mph circus beat stuff […] Sometimes I just went for a 'feel' of what was being plkayed [sic] because there was NO WAY to get everything the guy was playing to cut through the GTRs and bass! […] These were mostly mid to late '80s Texas metal bands like: Gammacide, Morbid Scream, etc…" "Gearspace.Com - View Single Post - The Art of Triggering Drums."

[46] "I guess for me the biggest thing was the double bass, right? Because that was the whole thing […] some of the early album, like the early Slayer, Dark Angel, or Celtic Frost. You could always feel the bass, but there was always drums, to me they were a little boomy. Especially because our stuff was faster, it was nice to hear the the click and the attack and all that. […] I think in the beginning… triggering for me was so you could really get those bass drums clicky, and you could get them up in your face without getting all the amp super-click ambiance with the drum and all that." Into the Darkness Interview Series, *1 Hour 36 Minutes with Scott Burns*, 26:48-27:25, 36:45-37:05.

[47] Into the Darkness Interview Series, *1 Hour 36 Minutes with Scott Burns* 30:00-32:16.

Samantha Bennett cautions against overstating the digital-analog divide, reminding us that: "[…] digital technologies did not change recording practice overnight—analogue recording remained central to many professional and semi-professional workplaces until the turn of the millennium."[48] Like any business forced to keep up with technology, Morrisound's equipment was in constant flux since its founding. While Morrisound started as an 8-track studio in a van, it soon upgraded to a larger facility—a former bank building with high ceilings. This real estate was a non-negotiable for tracking drums, a piece of equipment in its own right. Soon, the studio could advertise itself as the first 24-track recording facility on Florida's West Coast. The studio's technological centerpiece, the nexus for processing, monitoring, and combining tracks, was a SSL 4000G console, which could save and recall settings and thus encouraged extensive dynamics processing. This fundamentally analog core—the board and its "in-line processing"—was augmented with "outboard" equipment: additional dynamics processors, but also early equipment that could store digital samples.[49] All three key engineers mention use of the Akai S 3000, a keyboard sampler, and the TC 2290, a digital delay device with limited sampling capabilities, but comparatively low latency.[50] Unlike electrical equipment, which responded near-instantly, early digital hardware responded with significant delays.

While digital storage and recall is, in theory, non-linear, the processing time required to perform these operations in the late 1980s made targeting those samples onto analog tape difficult, since on the latter medium, time linearly corresponds to space. Such delays in processing and outputting sounds, often tens of milliseconds, challenged both processes and caused breakdowns in

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[48] Bennett, *Modern Records, Maverick Methods: Technology and Process in Popular Music Record Production 1978-2000.*

[49] Virtually of this equipment—including the massive console—ended up being stolen in a burglary in 2011, after which the studio relocated. See "Legendary Recording Studio Morrisound Burglarized."

[50] Digital delay devices were the earliest commercial application of digital samples, combining an original sound with its stored copy. Brøvig-Hanssen and Danielsen, *Digital Signatures: The Impact of Digitization on Popular Music Sound,* 47.

the intended signature. But it most affected the track-triggered process, since it involved the stacked

latency of a noise gate and sampler. I treat this process in greater detail as part of the *Blessed are the Sick*

case study below. A common limit of both processes was their inability to trigger samples of different

velocities. According to Tom Morris, neither process could represent variations in velocity: "We did

not have a way to trigger with varying velocities until we began using DAWs for triggering." This

evenly powerful dynamic suited death metal, but Tom Morris also thinks "the lack of dynamics that

some or the early triggering techniques caused did give a more machine like quality to the part."[51] Due

to limited storage space available and the crude ways of triggering, only one sample would be used per

drum track.[52]

The sequenced approach struggled with time in a unique way: it was a chore to program, but

also allowed for solutions to the most problematic cases—situations where drummers could not

perform their parts at all. In order to synchronize the sequencer with the tape machine, one had to

painstakingly translate rhythmic patterns into time points and then input the results of these

calculations into a DOS-based sequencer. Jim Morris recalls having to reconstruct the "text" of

unplayable drum parts by asking drummers to spell them out:

> […] we would sit there and calculate the distance in milliseconds between snare drum hits, ask
> the drummer how many kick drum hits are supposed to be between them, then figure out in
> milliseconds how far the kick drums were apart, and then we had to type them in.[53]

The MIDI protocol used by the sequencer could be synchronized with the tape machine in two ways:

either through relative time, a MIDI clock that could be synchronized to a click track, or through

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[51] Interview with the author, email.
[52] After exponential increases in storage space, modern virtual instruments used for drum replacement now often
contain several different samples for each drum at different levels of velocity. Effectively, technological re-introduced human
imperfections—as a creative choice, not a fate, albeit one that is often foregone in modern metal productions.
[53] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 44%.

absolute time, such as the SMPTE frame protocol initially developed for scoring movies. Since most bands were unable to play to a click track, it was impossible to copy and paste patterns—making the process slow and expensive. While Jim Morris foregrounds the sequencer-based approach and takes credit for its creation, both Tom Morris and Scott Burns suggest it was a method of last resort.[54] Some records, in particular, Burns' journeyman work *Leprosy*, suggest the use of the sequenced method nonetheless with their eerily even timing—and the time-consuming nature of programming varied fills would explain the simplifications compared to the live version transcribed above.

In this section, I've outlined a framework for interpreting the studio process that scrutinizes the metaphors used to communicate intentions and align activities in the studio and begins to distinguish between intended signatures and accidental traces. With this conceptual framework in place, I introduced the two processes and methods Morrisound came up with to solve the "distortion paradox" that hobbled death metal in the late 1980s: a track-triggered and a sequenced process for deploying samples. Morrisound's engineers voice different aesthetic preferences: sometimes, the correction of perceived performance flaws is foregrounded, sometimes, control over the mix is given as the main *raison d'être* for these interventions. The metaphors engineers use suggest that they read the contingencies of performance like a text—a hidden symbolic meaning, to be extracted from a noisy source (and, occasionally, the verbal descriptions of drummers).

Re-narrating automation

In this section, I analyze the traces that Morrisound's process left on *Blessed are the Sick*, as well as its

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[54] Tom cannot recall using it ("It's actually much easier to trigger a sample from a performance than to spend the time it takes to properly program it. We very rarely programmed drums, and never on a death metal album to my knowledge.") but Burns suggests he used it occasionally in the podcast.

controversial reception. Due to this controversy, the album's creation was documented in great detail—allowing me to reconstruct how the audible traces pursued by reviewers index the distinct tempor(e)alities of human performers, analog tape, and digital equipment. In addition to deepening Sybille Krämer's discussion of the trace as a springboard for narrative reconstruction, I capture the non-discursive flows that caused the material substrate for these re-narrations—the time-critical difference between analog and digital temporality. Building on the media archeology of Wolfgang Ernst, I diagram the automaton that re-performed a drum take on analog tape onto a new track in real-time. Ultimately, I argue that the documentation of the distributed agency between producer, drum performance, and automated re-performance is a response to responses to its traces. By describing the automation in detail, producer Tom Morris deemphasizes his agency compared to the later cut-and-paste paradigm. The embodied musical time captured on the resistant, linear medium of tape authenticates the use of samples, even when overwriting the contingency of physical exertion with the undulating imprint of the digital symbolic.

Morbid Angel's controversial apex

At the time of its release, *Blessed Are the Sick* was a crowning success for Morbid Angel and the death metal scene. The album would even win the band a short-lived major-label contract. Recorded and released in 1991, it was engineered by Morrisound co-founder Tom Morris, with production credited to the band. These credits reflect the values of metal noted above: all creativity is meant to emanate from the band. Compared to *Altars of Madness'* consistently high pace, *Blessed are the Sick's* newly composed songs juxtapose slow, but intricately ornamented dirges with breakneck blast beats. The lyrics and imagery moved from cartoonish horror into polished occultism, as vocalist and bassist David Vincent raised eyebrows with racist and social Darwinist comments in interviews. These elitist

sentiments are framed by a 19th-century symbolist painting on the cover, Jean Delville's *Les trésors de Satan* (1895): all in coral tones, it juxtaposes half-classicist, half-Blakeian figures over a psychedelically fractal Altdorfer landscape. Lucifer tiptoes over a writhing river of flesh flowing from his royal mantle, his weight temporarily supported by his barbed tentacles. That leap over fallen souls was prefigured death metal's fate. Soon, labels would first pull bands from recording at Morrisound, before dropping a generation of death metal bands. In retrospect, *Blessed are the Sick* marked a zenith for Morrisound and death metal—and Morbid Angel was one of the few bands to survive this deluge.

The subsequent reception of the album, too, has been mixed: admired for its songwriting, the sound of its complex drum part has proved divisive. More so than that of *Leprosy*, which eschewed outright blasting and disorienting stop-and-go fireworks. While the album holds a high average review score on the *Encycopaedia Metallum*, many reviews single out its drum sound as suspect. The oldest review, from 2003, decries "blast beats that don't blast," one soon after describes the drum sound as "harmless and triggered". Others choose words that recall the association between drumming prowess and hegemonic masculinity, with one writing that "The drums […] have a queer 'fakeness' to them." Another bestows "eternal hatred […] on albums like Blessed are the Sick, with the sterilized and clicky drums."[55] Something about the way that the drum sound on *Blessed are the Sick* behaves, compared to what listeners expect based on physical experience and generic norms, disturbs their experience. This some-thing, which points to some-one, is a trace.

What I suggest is that these reviewers are reading traces and narrating their origins, even the ones who don't follow these tracks quite very far. In Krämer's epistemology of the trace, "something only becomes a trace when it occupies a well-defined place in relation to a plausible story that produces

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[55] "Morbid Angel - Blessed Are the Sick - Reviews - Encyclopaedia Metallum: The Metal Archives."

a connection between the visible and the invisible."[56] Or, in our case, the audible and its invisible cause. Viable candidates for causes will vary with the trace's narrator. For some, the material impediment to their anticipated experience is fully explained by the "fakeness" of its origin, others trace it further to inferred studio processes and technologies. Narrators resort to whatever is needed to resolve the uncertainty wrought by the trace's incursion into their experience. Krämer draws on Emmanuel Levinas to theorize how this otherness is assimilated into the self's immanent understanding. The unassailable face of the other, as the "authentic trace" points to a past and time beyond linear representation, "an insertion of space in time," in the words of Levinas, "where the world inclines toward a past and a time."[57]

But this is where the time-critical nature of sound asserts itself: Krämer focuses on *spatial-visual* traces, which predate sound recording. Yet the *temporal-aural* traces narrated here add a layer: they are discontinuities in time, which point to a space that affected them, a space in which a complex assemblage of times was coordinated over time to produce them. And, most importantly, someone coordinated them—opening up the possibility that responses to traces are, in turn, answered.

Tales of the Sick, a documentary produced for the 2009 re-release of the album, responds to the reception of these traces—by narrating the process that caused them in surprising detail. Conspicuously, engineer Tom Morris is the first person to speak for more than a few seconds in the one-hour feature, instead of peer bands exalting the record, to name but one alternative. Morris distances his process on the first two Morbid Angel albums from that of modern engineers, paradoxically asserting that there was no triggering—but that there was sample use:

> I mean what you hear on both of those records is an analog recording, there's no time correction in any of the parts, there's no pitch-correction on anything, no beat detective going on like

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[56] Krämer, *Medium, Messenger, Transmission: An Approach to Media Philosophy*, 177.
[57] Krämer, 181.

people do to drum tracks today. It was all cut live with Pete [Sandoval]—there's very little in the way of sampling on any of the drum tracks. There's… to the best of my recollection, I may have added—on Blessed, not on Altars, but on Blessed—a snare sample and a kick sample to the acoustic kit, but everything else, all the toms and cymbals and all that are his live kit as he played it live. So there's no triggering or any of that, the replaced drum parts.[58]

What could be the reason for this? Memory seems an unlikely culprit. Morris' emphasis that it was "cut live," on "an analog recording," as well as the disavowal of modern "time-correction" software suggests he is simply responding to changing industry standards—like the use of the quantization software *BeatDetective.* But Morris is not simply positioning *Blessed are the Sick* as "closer to live" than contemporary productions. Rather, his explanation of the engineering process is a counter-narrative to how others narrate the traces of its process. A little later, the band's former manager acknowledges that the cleanness of the record was, indeed, controversial, supporting this interpretation—just like the fact that several of the reviews cited above predate the film's release. Morris's response takes the form of a detailed reconstruction of how the drum sound on *Blessed are the Sick* was achieved—and the resistances Morrisound's track-triggered process had to overcome.

Making space for analog-digital latency

Before diving into Morris's account of the drum replacement process used on *Blessed are the Sick*, a framework for conceptualizing the non-narrative substrate of his narrative is in order. If Krämer's "left-Kittlerianism" theorizes how traces mediate sense-making, Wolfgang Ernst's "right-Kittlerianism" zooms in on the not-sense of media. Ernst's media archeology focuses on the extra-historical *tempor(e)alities* of media, their *Eigenzeit*: the distinct ways in which media process and store time, including ways not accessible to human perception or narration.[59] But this temporality has a form that

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[58] *Tales of the Sick - A Closer Look*, 3:13-3:56.
[59] Ernst, *Sonic Time Machines: Explicit Sound, Sirenic Voices, and Implicit Sonicity*, 93.

structures the flows of continuous analog signals and the transmissions of discrete digital information. Ernst's archaeological approach reverse-engineers and re-activates discarded and disused "time machines," insisting adamantly on using original hardware, not emulation. Or worse, symbolization.

Unfortunately, I cannot follow Ernst's advisory to re-assemble and re-run Morrisound's process verbatim. The signal chains of studios are transient assemblages, a bricolage of devices that, even if they were documented in exhaustive detail, would be impossible to gather as they once were. Nonetheless, I appropriate Ernst's "operative diagrams" to visualize the setup described by Morris. Fellow media archeologist Jussi Parikka explains that these "diagrams are to be understood in the very technical sense of a visualization of information patterns, circuits and relations which give an idea of how the otherwise so complex machines work."[60] To music theorists, these diagrams will invoke the transformational graphs pioneered by David Lewin.[61] They also resemble the cybernetic Heyde diagrams that Jonathan De Souza has reintroduced into organology.[62] The crucial difference comes down to the different tempor(e)alities involved: my diagram focuses on time-critical complications, such as MIDI latency and the spooling of tape. The cybernetic optimism that underpins atemporal graphs usually abstracts from these processes that take time *and* space. However, this friction can be heard on *Blessed are the Sick.*

This brings us back to *Tales of the Sick*, where Morris goes on to describe a system of circuits that was micro-temporally tuned to the unique demands of death metal drumming:

> […] because it's coming off analog tape, you had to take the trigger signal from the erase head, which the tape got to before it got to the playback and record head. So, it gave you a few milliseconds of pre-delay for the trigger. Which allowed you to trigger the sample within a millisecond or two of when it actually had to be recorded to be in sync with the acoustic snare

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[60] Parikka, "Operative Media Archaeology: Wolfgang Ernst's Materialist Media Diagrammatics," 62.
[61] Lewin, *Generalized Musical Intervals and Transformations*. Steven Rings provides a very readable introduction to the use and theory underpinning transformational graphs in Rings, *Tonality and Transformation*, 110–16.
[62] De Souza, *Music at Hand: Instruments, Bodies, and Cognition*, 32.

drum. So it was digital sample that was triggered from a gate off the erase head for that track…
these days most people […] they would chop it all up and to me that kills the feel and the
emotion of the song.[63]

As a process, the use of noise gates to trigger digital samples was well-known to engineers in the late

1980s.[64] Noise gates are used to cut off signals below a certain threshold by opening only for inputs of

a certain amplitude. More advanced models could output a MIDI command once they reached the

"open" state. However, the latency of early MIDI equipment—including noise gates—and the time it

took for samplers to output their stored data as a signal was challenging. Lee Harrison, a drummer I

quoted on the "latency problem" in Chapter 2, notes the need for a workaround: "when you would

use a triggered kick sound to mix or mimic the kick drum, it would actually show up late in the mix,

so [Morrisound] figured out a way to go around that and make the trigger on time with the natural

kick hit."[65] Before the runtime of the gate-sampler setup was over, the tape with the performance to

be reinforced (or replaced) had moved on.

The operative diagram of Example 11 shows how the setup that Morris describes makes space

to bridge the distinct tempor(e)alities of analog tape and the latency of a digital sampler. This is the

precise temporal tuning that death metal's pursuit of fast subdivisions called for. The tracked

performance of one drum (like the kick drum's, isolated by microphones) is stored on one of the 24

tracks (next to each other, like lanes on a road) on one reel of 2-inch-wide tape. This tape spools at 15

inch/s (38 cm/s), passing into turn (shown from left to right) the erase, record (or sync), and playback

heads. These rings of ferromagnetic metal can emit or pick up magnetic fields through an opening,

which differs in size according to function. In theory, each and every one *could* record or pick up a

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[63] *Tales of the Sick - A Closer Look*, 4:42-5:30.

[64] For example, it is described in a general introduction to the noise gate in Mellor, "How It Works: The Noise Gate."

[65] Quoted in Netherton, *Extremity Retained: Notes from the Death Metal Underground*, Location 3693.

signal—just with different degrees of fidelity. The versatility of the record head is the linchpin of multi-track recording: as sync head, part of it can pick up the signal of one track, while another part can record this signal to another track after having it run through the console—or further equipment.
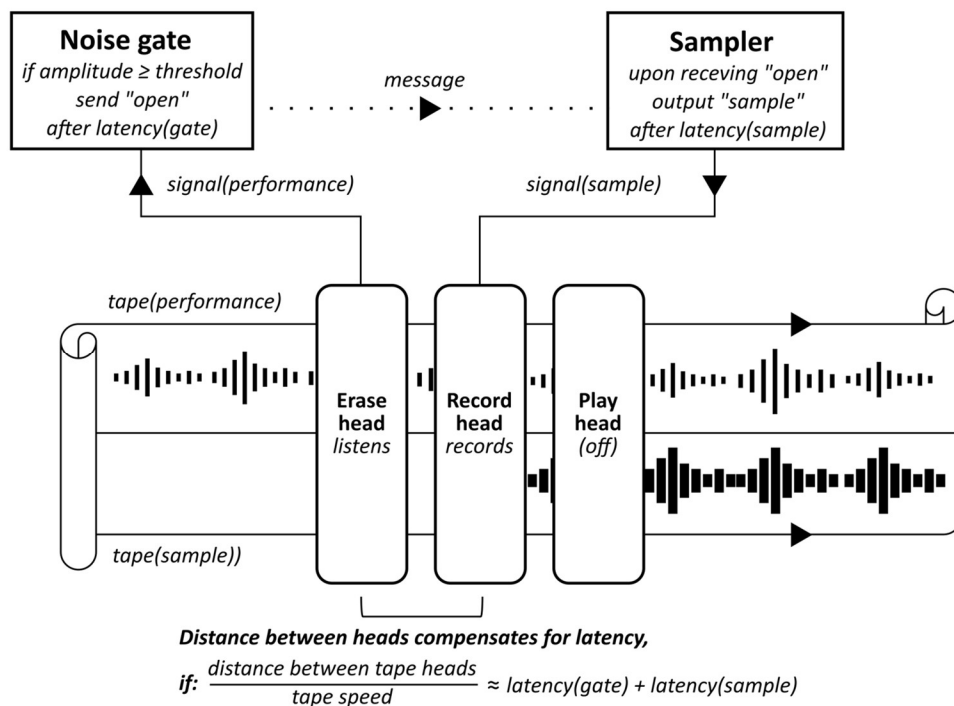
Example 11. Operative diagram of the track-triggered sample deployment process described by Tom Morris. Modifying the erase head to pick up the signal of the performance creates space that compensates for the latency of noise gate and sampler. This detour that temporarily converts a continuous signal into symbolic directions for the re-performance with samples.

But while electric processing—such as amplification—is instantaneous, the MIDI output of a noise gate and the recall of a digital sample take time to process. Hence, samples would be late—unless space was made for them. Modifying the erase head to pick up the signal did just that. Whether the erase head was replaced with a more precise head with a smaller opening or whether it was merely rewired to output a lower fidelity signal is up in the air. The signal did not have to be high quality, since—in an inversion of Shannon's message-signal-message paradigm—the listening noise gate would convert

the continuous signal into a discrete message for the sampler, which would then generate a new signal for the record head from one immaculately repeated digital sample. Supposing the erase head was one inch removed from the record head, at a tape speed of 15 inch/s, this would yield 1/15th of a second—or 6.66 milliseconds. While in other styles, samples being off target on the tape would not register, rapid blast beats would fall apart.

And yet, to many of the listeners, those blast beats did fall apart aurally. Death metal thus makes the analog-digital contradiction audible. Compared to the even, metronomic timing of *Leprosy*, the faster and more humanly timed drumming of *Blessed are the Sick* puts the use of only one sample per drum into stark relief: even more so because these samples only appear in the fastest sections, where the snare sounds perpetually *early*. In the micro-second misses of Morrisound's automated sample deployment, we can hear the stuttering re-entry of music into the symbolic, where the "temporal indexicality" of the physical event is radically simplified into a binary message, a transient score for a performance to be recorded.[66] To the sounding trace corresponds an inaudible, temporally removed origin. The sonic points towards *sonicity*, Ernst's generalization of sound beyond sound: oscillatory events and their obverse, the frequency domain.[67] Sonicity is the inaudible musicality of this drum replacement setup, the form it gives to frequency, it is the continuous signals and discontinuous message flowing between the devices of the drum replacement network, the circuits and chips within the devices. Ultimately, we may suspect that the micro-temporal quirks that fans negatively respond to are the reason the non-sounding, but no less musical configurations of *Blessed are the Sick* are so well documented.

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[66] Ernst, *Sonic Time Machines: Explicit Sound, Sirenic Voices, and Implicit Sonicity*, 35.
[67] Ernst, 22. In its focus on oscillation as the implicit musicality of everything, Ernst's metaphysics anticipates the grand unified music theory that Alexander Rehding and Daniel L. Chua propose in *Alien Listening*.

In the context of introducing a death metal album in a documentary, the technical detail the documentary goes into—to say nothing of my exegesis of it—might strike one as excessive. But I believe this is the rhetorical strategy here. While I cannot and do not want to conclusively impute an intention to Morris or the editors of the documentary, do I want to draw attention to the work this retelling of past technology does in the context of death metal's value system. This narration of past inconveniences helps build an archive. Morris contrasts the linearity and resistance of the tape medium with modern processes, which are both visual and reversible. We may state Morris' implicit claim as: "linear representations of a performance's timings are authentic representations." By describing the automated process in detail, Morris de-emphasizes his own agency vis-à-vis the machine he has built. Once he has put the setup into place and calibrated the timing, it is the taped drum performance that re-performs the samples. When captured on the linear and inconvenient-to-edit medium of tape, the integrity of Sandoval's physical effort, its "temporal indexicality," rhetorically authenticates the use of samples. At the same time, this is only necessary because the trace was controversial in the first place.

Thus, we are faced with two archives and archivists. An example of media archeology, in the two guises elaborated in this section: Kramer's reading of the trace and Ernst's recovery on the artifact, which are, however, dialectically related by death metal's continuing reception of how it was produced, which turns "the macro-temporal and spatial understanding of archives turns into an epistemological-engineering perspective into the machines of archiving-as-temporal modulation."[68] On the machine side, there is Morrisound's studio assemblage as archivist: an automated transcription of a tracked, human performance. But while in its circuits, nothing but signal and data flows, we are dealing with a purposefully assembled machine: its output is judged from this symbolic vantage point. And this

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[68] Parikka, "Operative Media Archaeology: Wolfgang Ernst's Materialist Media Diagrammatics," 66.

purpose—that somewhere, someone was supposed to make sure something sounding like a believable performance came out of that apparatus, to realize it as a signature—continues to radiate and inspire the second kind of archiving. An archive created in response to the mismatch between the inscription and anticipated intention, by fans pursuing traces and creators fueling this *Schautrieb,* a scopophilia driven by acousmatic experience: the desire to know, to see all that escaped inscription as signature or trace.

Dependency and inequality

After this deep dive into traces and their narration, I return to how Morrisound's process reorganized extreme metal's gestating system of subgenres. First, I contrast the modus operandi pioneered at Morrisound with other methods that could achieve clear, high-impact drum performances. The studio had a short-lived technological edge since alternative processes could be expensive, limited by the analog medium itself, or constrained by recording spaces. Secondly, I illustrate how the rise and fall of Morrisound's esteem led to a new batch of troubled death metal productions. Now, albums were held back because they failed to exhibit Morrisound's sonic signature. And, when pressed to record at other studios, bands would discover that neither they nor the local engineers knew how to replicate Morrisound's achievements.

Analog and analog-digital alternatives

Morrisound's solutions offered distinct advantages over competing approaches. The studio's engineers disagree on how unique Morrisound's approach was, but the fact that their process was treated—and appropriated—like a trade secret suggests leadership in their market niche. Jim Morris downplays the uniqueness of Morrisound's approach, citing Bob Clearmountain's work with Bruce Springsteen as an antecedent for sample drum replacement. He locates the difference in the speed of death metal and

budgetary constraints, which forced the studio's engineers to become inventive:

> We were just doing it louder and heavier and faster, with lower budgets. I mean, we did not invent anything that was not already in use in recording technology already in some way, […] We did, however, combine different tools in order to get the work done. There was just no other way to do it at the time, because the budgets started shrinking, yet the quality had to stay the same.[69]

Burns, on the other hand, paints the Morris brothers as pioneers when it came to controlling the mix with samples: "Jim and Tom were way ahead of their times, doing the [TC]2290s, they started that when they did a lot of slow metal [...] the Savatage stuff, the Crimson Glory."[70] Scott adapted these existing techniques, eventually refining them into a process other record labels and producers coveted.

Jim Morris recounts an instance of recording-industrial espionage that helped spread Morrisound's signature death metal production, at a point when labels were looking for alternatives to the increasingly over-utilized Florida studio: "[…] one label even sent a producer who shall remain nameless to actually watch Scott do a record, so he could learn what Scott's secrets were. […] Then, they turned around and paid that guy more than they paid Scott […]"[71] Most likely, this producer was British producer Colin Richardson, who produced Massacre's *From Beyond* for Earache Records in 1991, with Burns engineering.[72] Up to this point, Richardson's productions such as Bolt Thrower's *Realm of Chaos* or Carcass's *Symphonies of Sickness* featured raw drum sounds. After the collaboration, Richardson's productions began to use drum samples.[73]

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[69] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 45%.
[70] Into the Darkness Interview Series, *1 Hour 36 Minutes with Scott Burns*.
[71] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, 45%.
[72] This transatlantic collaboration was noted by influential US death metal fanzine *Disposable Underground* in a review of the Massacre record. Johnson, "Disposable Underground Volume 1, Number 3," 47. At the same time, critical voices began to decry the predictable attributes of Morrisound's efforts. Some discontents are voiced in the review ("The album was produced by Colin Richardson at Morrisound with Scott Burns engineering, so there's no bass guitar […]"), I cite a more thoroughly negative take from the same issue below.
[73] As early as 1991, and before Carcass' *Heartwork* of 1993, where Duncan Williams points out their use. Williams, "Tracking Timbral Changes in Metal Productions from 1990 to 2013," 45. I explore how this spread of this drum production paradigm coincided with British grindcore bands crossing over into death metal in Chapter 4.

Analog productions that worked only with tape and dynamics processing also could achieve the consistent, in-your-face drum paradigm Morrisound was famous for. But even given enough time and budget, entropy asserted itself as a limit when drum performances were assembled from tiny snippets of tape. A case in point is Metallica's 1988 album, *…And Justice for All.*[74] Often chastised for a mix that renders the bass guitar inaudible, it also features a harbinger of the typewriter drum sound—albeit one achieved with analog processes. Part of the producer Fleming Rasmussen's solution was smart microphone placement and extensive dynamics processing.[75] But at the tracking stage, the transient-rich kick and snare sounds were also achieved with brute force: Lars Ulrich simply had to hit harder. But since Ulrich had to strike the drums unnaturally hard, he would tire out quicker, and the drum part had to be assembled from countless short takes. Each time these glued-together takes were "bounced" from tape to tape, the signal degraded further—so much that 30 years on, the original master tapes are beyond rescue. If one were to get a hold of the complete tape box, "there'd probably be about 50 million pieces of tape all over the place," according to engineer Toby Wright.[76] The decay of the medium used registers the labor time demanded by the process, "the tempor(e)ality of 'history' corresponds with the entropic deterioration of the electric charge and chemical carrier of the magnetic tape versus symbolical, i.e. almost time-invariant 'tradition'."[77] The symbolic invariant transmission of *one* digital sample onto *one* tape gave Morrisound's approach an edge in repertoire with drum performances consisting of thousands upon thousands of strikes.

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[74] Metallica, *……And Justice for All.*

[75] As shown on photos posed by Rasmussen in response to fan inquiries about the production of the album, the kick drum's front-facing head of the drum had a hole in it and its body was stuffed with pillows. Microphone placement inside of the drum further reduced resonance: one close mic to capture the attack, one further away to capture resonance that can be mixed it as needed later. Rasmussen, "Ny Side 1."

[76] "Metallica Engineer Recalls Millions of Drum Edits on 'And Justice For All'," https://q102.iheart.com/content/2018-02-23-metallica-engineer-recalls-millions-of-drum-edits-on-and-justice-for-all/.

[77] Ernst, *Sonic Time Machines: Explicit Sound, Sirenic Voices, and Implicit Sonicity*, 123.

An analog-digital alternative, the use of an electronic drum kit to trigger samples directly onto tape, offered a fallback for studios that did not have the large spaces and complex microphone setups needed to capture acoustic drums. Electronic drums use plastic or rubber pads equipped with sensors. When struck, these trigger sounds in a sound module. Early commercial electronic drum kits—like the Simmons SDS-5—synthesized sounds that barely resembled acoustic drums. Starting in the 1980s, when Yamaha and Roland entered the market, use of samples became the norm. As support for the MIDI standard increased, kits eventually could trigger samples stored on external devices. In theory, some models could also pick up hits of different velocities.

However, many samplers—especially at the lower end of the price range—could not store different samples for different velocities. Instead, they would play back *one* sample at different volumes, an uncanny "fade" effect that doesn't approximate how the timbre of instruments changes at different intensities. In extreme cases, every drum would be represented by only one sample at only one velocity. These transparently synthetic sounds are common on extreme metal records recorded in the relative periphery, such as on the 1987 album *I.N.R.I.* by Brazilian band Sarcofago.[78] But while the use of electronic kits was more common at the edge of the recording industry, in the Global South and on the edges of Europe, these devices also offended the sensibilities of drummers attached to their acoustic instruments, as Scott Burns recalls.[79] Electronic drums thus signified both low capital and digital encroachment. They were too low-tech and too high-tech at once.

The most famous sonic signature shaped by electronic drums is that of Sunlight Studios, created by Tomas Skogsberg. The studio's original Stockholm location was little more than a hole in

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[78] *Sarcofago, I.N.R.I.*
[79] "I will just say this looking back, if I told Steve Flynn [drummer of death metal band Atheist, author] to play us a drum pad, he'd punch me in the face. He'd just tell me I'm full of shit." Into the Darkness Interview Series, *1 Hour 36 Minutes with Scott Burns*, 38:23-38:46.

the wall. But while the "Sunlight sound" would go on to define Swedish death metal just as Morrisound's defined US death metal, it was still lacking when Skogsberg produced Nihilist's second demo, *Only Shreds Remain* in 1989.[80] The acoustic kick is inaudible, and the snare drowns amid distortion and interference from the cymbals. This crowded mix that reflects the space it was recorded in. But only months later, when Nihilist—now called Entombed—recorded their acclaimed debut album, *Left Hand Path*, Skogsberg had completed "Sunlight sound." The solution were ddrums, an electronic kit produced by a Swedish company that could pick up different velocities and featured proprietary samples on exchangeable memory modules, sold separately. Except for the snare and cymbals, all drums were samples directly triggered onto the tape by the drummer's performance— meaning the tracks recorded with microphones were easier to isolate and process.[81] And processed they were. Compared to Morrisound's drum productions, the Sunlight sound features even brighter, high-frequency rich toms, snares, and cymbals—a concession to the mid-range being occupied by the guitars, a marked difference from Morrisound's high-and-low "scooped" equalization.

However, the proprietary samples used by Sunlight's electronic drums homogenized the drum sound across bands, which called into question the authorship of bands. Morrisound, which recorded samples from the physical kits of drummers, and blended them with acoustic tracks, could offer greater individualization. Skogsberg ran with the process he developed with Entombed, discouraging bands from using their own equipment. Nocturno Culto, vocalist of Darkthrone, recalls that the band had to fight to be allowed to use any acoustic drum heads at all—and eventually had to settle for ddrums.[82]

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[80] Recalls drummer Nicke Andersson: "I think the production on our second demo sucks. The drums, especially, sound awful. Skogsberg didn't know much about how to take care of death metal back then." Ekeroth, *Swedish Death Metal*, 78.

[81] Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 111. The acoustic snare was hard to replace, since drummers rely on the feedback of the drumhead—the bounce back—to perform fast snare techniques like the blast beat. Since the rubber pad responded differently, the skill was not transferable.

[82] *A Blaze in the Northern Sky*, 18:50-20:05.

Such dependence—which also extended to bands working at Morrisound—was anathema to the value of independence and sole authorship demanded of bands. And while Morrisound was not associated with a single band, the Sunlight sound became synonymous with Entombed. Late-comers—that is, all other Swedish death metal bands—risked being chastised as epigones.[83] Being accused of following a trend is close to the worst charge accusation in the scene, an economic as much as a moral transgression. While accusations of "trend-hopping" in the epistolary infrastructure of metal aim at returning power to the grassroots, labels—as rational economic actors—are equally intent on being leaders, not followers.

The sounds of label-mandated dependence on…

Eventually, the success of Morrisound's sonic signature doomed its close relationship with death metal. The halo of *Blessed are the Sick* helped a few bands like Morbid Angel get major-label contracts and some airplay on MTV's *Headbanger's Ball.* But the temporary boom and influx of capital in 1993 was followed by a bust in 1995, which saw numerous bands disbanding in disappointment.[84] Just before that contraction of the death metal bubble, record executives advised bands to avoid Morrisound. In Mudrian's pioneering oral history of the subgenre, Monte Connor of Roadrunner pulls no punches: "we started pulling away from Scott simply because it became so trendy and it was just like assembly

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[83] Metalion's editorial in Slayer Mag #8 of 1991 captures this sentiment and marks the re-orientation of the fanzine away from death metal, towards the buddying black metal scene: "Now there is the MORRISOUND sindrome. [sic] It is so boring how all the bands sound the same there… The production be killer, but it ruins the identity of the bands… I think it is very difficult to find some major differences. […] the same goes for the SUNLIGHT studio in Sweden… They all sound the same. Almost everybody is trying to copy ENTOMBED." Kristiansen, *METALION: The Slayer Mag Diaries*, 188.

[84] "The prime directive of Roadrunner," says Conner, "has always been to sign a band, try to sell 10,000 or 15,000 on the first record, and then try to branch that out to 50,000 or 100,000 on the second and 200,000 on the third. After a while it just became no fun to sign these death metal bands with ceilings on them and know that no matter what you did, no matter what kind of record the band made, no matter who produced it, no matter how much money you spent promoting it, you were gonna sell this amount of copies, because this is what the market was. Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 231. See also Purcell, *Death Metal: The Passion and Politics of a Subculture*, 29 %.

line stuff to go to Scott Burns."[85] After 1993 Morrisound produced fewer death metal albums, with Burns restricting himself largely to bands he was on friendly terms with. By 1998, he settled on a new career as a programmer.

But Scott Burns didn't pigeonhole himself. The production standards pioneered on *Leprosy* became obligatory for death metal bands—t least in the eyes of label executives, who—before they shunned it—saw it as an indispensable requirement for the subgenre. As early as 1990, labels attempting to replicate Earache's recent success with death metal would refuse to release albums if they did not feature considered the crisp, punchy Morrisound drum samples. That labels overrode band preferences complicates the notion that Burns imposed a uniform, sub-genre blind template by default, or that bands actively demanded it.[86]

An example of bespoke production by Burns being overridden by a label may be found in the case of proto-death metal band Master, which had little luck with labels in general. The then Chicago-based band recorded a full-length album for Combat Records in 1985, but a dispute foiled the release of the album. As a message in a bottle, this album—only officially released in 2003, but circulating as an influential bootleg before—offers a glimpse into an alternative origin of death metal.[87] Master's style is heavily indebted to hardcore punk, the recording quality barely rising above garage efforts and is soaked in harsh, bright reverb. In search of a new label, Master turned to Nuclear Blast—who had just

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[85] Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2004, 69%.

[86] For example, Ross Hagen writes that "[…] the recording engineer Scott Burns, in particular, crafted a template for recording death metal that yielded consistently effective results. In doing so, Burns and Morrisound created a readily identifiable sonic signature, and bands who recorded with them expected to get that sound. […] Yet, there is a certain irony in the fact that the restraints of finances and time resulted in amateurish, but unique-sounding, metal records in the early 1980s, but in the cases of Morrisound and most twenty-first-century metal production those same restraints result in numerous "professional"-sounding records that all sound basically alike."
Hagen, *Darkthrone's A Blaze in the Northern Sky*.

[87] Master eschew the palm-muted, chunky riffs of the thrash metal-aligned Florida bands (and California's Possessed); instead, the un-muted tremolo-picked riffs, distorted bass, and occasional D-beat patterns recall Discharge as much as the earliest grindcore coming out of Britain. The pulse underlying Master's music was steady and controlled, as is customary in metal, however. Master, *Unreleased 1985 Album*.

begun signing death metal bands. Founded in 1987, the label initially released punk and crossover.[88]

Master was offered a contract to record at the studio that had netted their competitors a string of successes. Scott Burns engineered the album, but Nuclear Blast rejected the first mix. Subsequently, Master re-recorded the entire album with a different guitarist and drummer. This version, too, was discarded. Finally, Burns re-mixed the tracks recorded during the initial sessions, which were finally released as Master's eponymous debut *Master* in 1990.[89] To recoup some of the lost capital invested, the second session was released as *The Speckmann Project* by Nuclear Blast in 1991.[90] Finally, the original mix of the initial recording session surreptitiously replaced the re-mix.

What was the difference that led Nuclear Blast to demand do-overs? The lack of the label considered Morrisound's sonic signature. Both the re-mix and the second session feature crisp and clearly sampled drum sounds, as well as extensive compression and equalization on the guitars—they replicate the sound pioneered on *Leprosy*. By contrast, the initial mix recalls the unprocessed, almost ramshackle sound of Master's raw 1985 effort. While there is less noise and spill, the kick drum retains a natural, hollow timbre that competes, sometimes unsuccessfully, with the mid-frequency-rich guitars. This, however, ran counter to Napalm Records trying to establish itself in the rapidly expanding death metal market. Once the prestige of Morrisound waned, the less processed original mix created by Master and Burns became valuable once more and entered circulation again. These diverse mixes testify that Scott Burns did not apply a set formula to every band he worked with, at least if the band was proactive in shaping the mix. Master evidently preferred a production aesthetic more aligned with punk—and would have gotten it, where it not for vetoes from their label.

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[88] Nuclear Blast did not start out as a heavy metal label, unlike stated in Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 82. Compare with the label's history, archived at "Nuclear Blast.".
[89] Master, *Master*.
[90] Speckmann Project, *Speckmann Project*.

…and abstinence from Morrisound

Yet when bands were not proactive or unable to guide the production process, Morrisound did offer fallback solutions. Burns singles out three factors that contributed to standardization: low budgets limiting studio time, bands being inexperienced with how to achieve their desired sound, and the fact that death metal instrumentation means that the few possible differences in timbre are highly dependent on engineering:

> In my defense, it's pretty hard when you've got a week to get the best, heaviest guitar sound in the world, and the [artist] walks in and he has no earthly idea how to get that guitar sound," says Burns. "I'm not a miracle worker. I probably did 80 death metal records, but you've got drums, bass, guitar, they're all playing double bass, they're all downtuned and they're all barking, so how many ways can you make it sound different? Eventually, everybody gets used to doing things the same way. So part of it's my fault, but then part of it isn't. […] it was pretty hard when everybody just walks in and they expect miracles on shoestring budgets and they really don't have a defined sound.[91]

Contemporary fanzines registered the emerging standardization and dependence as early as 1991. In a letter to the editor of *Disposable Underground #3*, the writer criticizes the trajectory of the death metal scene since the mid-1980s, singling out Morrisound negatively: "Hey, it's okay to think that everything that comes out of Morrisound Studios in Tampa, Florida sounds like shit, 'cause I do, too. Don't be afraid to have an honest opinion."[92] In the same issue, Suffocation guitarist Terrance Hobbs is asked for his opinion on "everybody going to Morrisound," going on to defend Burns. At the same time, he shows little awareness of the studio process and suggests the band's guitar sound is completely "raw" and does not use any effects except on the solos, which use "a little bit of delay."[93] Down the line, the band conflating their live process and what it took to produce a record in the studio would have

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[91] Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 234.
[92] Johnson, "Disposable Underground Volume 1, Number 3," 37.
[93] Johnson, 10.

negative consequences for them.

Suffocation was no exception to lacking experience in achieving a refined death metal sound on record, in spite of their consummate musicianship and instrumental mastery. And so long as the band had access to Morrisound, they didn't have to worry about this process. The band's debut album, *Effigy of the Forgotten*, was recorded at Morrisound studios at the behest of their label Roadrunner Records in 1991.[94] Guitarist Doug Cerrito recalls that the band "just sat there and whatever Scott Burns said, we did."[95] Burns, for his part, was excited to work with a band whose guitarists could play precise enough to allow him to quad-track the guitars.[96] In quad-tracking, each side of the stereo spectrum features two distinct performances of the rhythm guitar tracks instead of just one. Combining the slight differences in timbre and performance, this creates a denser wall of sound, a quasi-orchestral effect. However, as Mynett points out, this requires high accuracy.[97] But as evidenced by their garage demos, Suffocation was a band of extraordinary instrumental skill and rhythmic coordination across the board.

However, the reliance on Morrisound—and the attempt to replicate its signature production—had repercussions for Suffocation's sophomore album. At the behest of their label, *Breeding the Spawn* was not recoded at Morrisound.[98] If the other albums surveyed so far have "controversial" production, *Breeding the Spawn* is known as *locus classicus* of outright failed production. All 15 reviews on *Encyclopedia Metallum* (averaging to a very favorable score of 91%) mention the production as an

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[94] Suffocation, *Effigy of the Forgotten*.

[95] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, Location 3441.

[96] Cerrito erroneously refers to this as double-tracking—which makes sense from his perspective, having recorded his part twice. But double-tracking is the norm in stereo-recordings—if the same track is used for both channels, the result is flat, if not mono in effect.

[97] "The standard of musicianship and precision required for quad-tracked rhythm guitars is crucial." Mynett, *Metal Music Manual*, 136.

[98] Suffocation, *Breeding the Spawn*.

issue—and the band decided to re-record all of the songs written for it on later releases.[99] According to Suffocation's other guitarist Doug Cerrito, the album "was a mess, because even at that time we still needed guidance as a band. We couldn't take care of it ourselves; we didn't know how to get that drum sound or that guitar sound on our own." Cerrito does not credit the sub-par results to lacking equipment, but to lacking expertise—since it was a "half-million dollar studio."[100] Taken on its own terms, the production of Mike Smith's drum set is excellent. It preserves the individual timbre and attack-decay envelope of each drum, which would be a virtue on a jazz album. But the preserved individuality of acoustic drums comes at a price in death metal. The kick's resonance tends to mask the bass-atrophied guitars, while the snare's sustain masks the kick in blast beat sections. Other flaws are not subgenre specific. The hollow sound of the guitars suggests poor phase alignment, that is, the waves of two identical or near identical signals canceling each other out. A plausible theory for its origin would be a botched attempt at replicating the quad-tracking of *Effigy of the Forgotten.* Instead of recording each rhythm guitar track twice, one performance might have been recorded with on two different amplifiers and/or microphones, a possible source of the phase-cancellation.

Other albums recorded during the search for alternatives to Morrisound faced similar fates. In many cases, avoiding the leveled-in dynamics offered at Morrisound meant a return to the muddy mixes of the earlier 1980s, though some fortunate bands could afford metal-adequate production beyond Morrisound. Malevolent Creation's *Stillborn* was recorded in a Gainesville studio that lacked any and all experience with the genre.[101] Monstrosity's *Millennium* avoided greater trouble by being tracked at Morrisound Studios—but mixed outside of it, in a studio that—to the surprise of the

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[99] "Suffocation - Breeding the Spawn - Reviews - Encyclopaedia Metallum: The Metal Archives."
[100] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, Location 3480.
[101] Malevolent Creation, *Stillborn.*

band—did not understand the drum replacement process at all.[102] Morbid Angel turned to a veteran of the pre-sample era. Blessed with an unusually large budget form their Columbia record deal, Morbid Angel's *Covenant*, the alphabetically logical 1993 follow-up to *Blessed are the Sick*, drafted Flemming Rasmussen as producer. Perhaps in a self-conscious correction of their previous effort, the snare's dynamics on *Covenant* are ear-openingly wide. A case in point is the drawn-out snare crescendo over a palm-muted ostinato on "Angel of Disease," from 1:37-1:47. This effect could be achieved with either a slider during mixing—or by retaining the original dynamics of the physical performance. At any rate, *Covenant*'s production went down easier with fans—and did not inspire criticism like *Blessed are the Sick*.

In this section, I situated Morrisound's approach within the available alternatives of its time. While the studio's analog-hybrid solution follows in the footsteps of the production mainstream of the 1980s, the efficiency and reliability of their implementation gave Morrisound a desirable edge—because they managed to circumvent the delays of early digital equipment. But the audible traces of different methods of drum production were audible icons of unequal access to recording spaces across the world. I also analyzed audible shape that labels over-investing in Morrisound and the subsequently withdrawing bands took on albums by Master and Suffocation, respectively. In the conclusion, I summarize how these questions of authenticity and access shaped the future not just of death metal, but of the entire subgeneric universe of extreme metal.

Drum replacement as misery index

The audible opaqueness of Morrisound's intervention was a precondition for re-hearing the highly

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[102] Monstrosity, *Millenium*. The band wanted to compensate for the flat dynamics of their debut, a limit of Morrisound's process, a flaw that their drummer did not feel corrected until their third album, *In Dark Purity*, which benefited from advances in technology, namely velocity-sensitive trigger-sample setups.

heterogeneous approaches to extreme metal drum production in the 1980s—a rehearing that continues to this day, as the debates cited at the outset of this chapter show. Imperfectly perfect, the sounding results of Morrisound's studio processes are ontologically unstable, something I theorized as a vacillation between intentional signatures and accidental traces. When it came to death metal's fast blast beat drumming, microseconds mattered—and by making space for digital latency on analog tape, Morrisound provided a key, if short-lived tech-processual edge. However, Morrisound's process struggled with implementing samples with different velocities. While dynamic evenness projected the desired power, it also exaggerated human imperfections in timing. Occasional use of fully sequenced (and thus mathematically precise) punch-ins, primarily for snares and kick drums, contrasted with more human-sounding moments. Finally, samples and tape might misalign ever so slightly. These temporal and dynamic glitches in Morrisound's solution instigate re-narrations of these processes in response to spirited debates about the records, feeding the archivalization of this turning point in extreme metal's subgeneric universe.

Yet against the corpus of prior attempts at death metal albums, Morrisound's productions sounded consistently powerful, and, even more importantly, were reliably repeatable—a stark contrast to a string of shelved attempts at death metal albums, with sounds that were as unique as they were underwhelming. This made Morrisound's production, now synonymous with death metal, a reference point, a yardstick against which other solutions could be measured. This forced extreme metal to re-experience its spatial distribution across the globe. In the late 1980s and early 1990s, drum replacement solutions were tied to the places they were recorded in. Morrisound's unique blend of high-quality acoustic drum tracks and locally recorded samples was made possible by the studio having enough physical space to record acoustic drums in the first place. Thus, in a negative sense, fully electronic

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drums kits also index recording spaces, even if none of the room ambiances makes it onto the tracks. Electronic drums were primarily used in hole-in-the-wall studios like Sunlight Studios in Sweden, and any place where budgets were tight—that is, across the global south.

I find it hard not to hear the final track on Sarcofago's 1994 album *Hate* as an ironic commentary on the decadent state of death metal drumming and production, formulated by a band that exclusively recorded in Brazil—with all the constraints that entailed. While their first two albums featured an electronic kit played by a human drummer, *Hate* used a programmable drum machine exclusively—which frontman Wagner Antichrist explicitly justified on grounds of other bands using drum replacement.[103] Inhumanely precise as they may be, the drum tracks nonetheless stick to tempos a human could plausibly play—that is, until the last track, suggestively titled "Beggar's Uprising." It begins with a reverb-y kick-snare alternation that gradually speeds up, recapitulating the evolution from back beat to skank beat to blast beat in a mere twenty seconds. But it keeps going, faster and faster, until it blurs into a timbre somewhere between power tool and flatulence, layered with bleating growls and guitar wails, before slowing down again—into nothingness. In a single song, and with drums the band programmed themselves, the band had achieved—arguably surpassed—the collective efforts of drummers and engineers in the affluent centers of death metal.

This unequal distribution of capital underpins negative reactions to the Morrisound production ideal. As digital recording and drum replacement became more widely available, this opened up the possibility for bands to more vocally appeal to the authenticity of their labor and the fidelity of their recording process. Digital and analog recording are framed as an absolute opposition: the digital becomes the master signifier of dishonesty as such, only increased with distance from the

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[103] Gimenez, "Sarcófago: Quarteto Que Virou Dupla," 54.

initial transition. In a 2009 documentary, all four members of Swedish death metal band Dismember position themselves against other contemporaries by expressing their distaste for digital recording, which they associate with falsification and misrepresentation of a band's actual ability. In the words of Guitarist Martin Persson: "We know what we're able to do, and we don't want to sound like something we're not in the studio." In the next shot, vocalist Matti Kärki is immediately shown to concur: "We don't believe in recording albums digitally, because it's a way of cheating." Next, Persson cites drum replacement and editing as a concrete example of such inadmissible cheating: "Some bands record digitally, then they sit and fix everything up a computer, every snare and every base drum." Eventually, the other members associate analog recording with liveness.[104] The montage thus presents a stringent narrative using terms established early in death metal's history: fidelity to one's labor, not the technology of capital.

More immediately, the telltale sounds of Morrisound's analog-digital drum replacement solution—out-of-sync-ness between different media—acquired an irritant potential that forced those who lacked access to the technology into new positions. As an opaque form of mediation, which read as American and digital, drum replacement established coordinates around which new subgenres could form, either through adaptation or opposition. Thus, the asynchronies examined in this chapter can be heard as spatial gaps, at the micro- and macro-level, which redrew the boundaries of extreme metal's emerging subgenres. Death metal drum replacement had to spatialize digital samples onto analog tape, which threatens to spool by before processing is finished. And, compared to the Morrisound-produced cohort of death metal, other drum replacement solutions could, ideally, establish themselves as local-sounding competitors, while others began to sound cheap and old. In the next chapter, I propose that

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[104] *Dismember - Under Blood Red Skies / Death Metal & Other Mental Illness*, 28:00-29:30.

grindcore and death metal can be understood as distinct and pleasurable ways of frustrating embodied engagement with its rhythms—and that this initial difference was consolidated by the triumph of death metal drum production.

CHAPTER 4. LOSING THE LOSS OF CONTROL

If you listen to a lot of old funk records, the drums are really small.
But you don't perceive it like that because the groove is so heavy.
— Lenny Kravitz, widely attributed to but unsourceable

Moving until you can't

Fans of extreme metal know that some extreme metal subgenres are more carnal than others—and that this distinction isn't just about the amount of viscera evoked in the artwork and lyrics (although that's part of it, too). Rather, different extreme metal subgenres engage the body in different ways and to different extents. Consider how a body-soul dichotomy is used to explain the difference between death metal and black metal to non-insiders in this article:

> Stylistically, death metal is more kinetic and primal than black metal. Black metal's riffs are a bit ghostier, usually with shrieked rather than growled vocals, and it often has an arch European flavor to it that death metal doesn't always have. Death metal is more about extremity of sound, as opposed to extremity of emotion. Thematically, the difference is as simple as body and soul. Death metal is, ultimately, an anatomical form of music, and black metal is a spiritual one. [1]

The Cartesian dualism is no accident: Norwegian black metal rejected corporeality as part of its determinate negation of grindcore and death metal, since in those subgenres, sound and sociality are meant to get bodies moving.

Black metal's anti-body propaganda also grasped that production style can't be separated from how sounds move you and let you move to them. The Norwegian black metal avant-garde visualized this insight by placing an icon of death metal and grindcore production at the center of their anti-dance, anti-fun polemic—literally. Moshing, common in metal and punk scenes, is a dance as much as a flailing, circling, and colliding of bodies.[2] The practice served as the namesake of Earache Record's

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[1] Krovatin, "FAQ: A Beginner's Guide to Death Metal | Kerrang!"
[2] For the benefit of those who would like to abstain from moshing, it is customarily constrained to a space called the "mosh pit." Mutual care—such as helping up moshers who fall, and not flailing into faces—is universally expected and

catalog numbers. "MOSH-003," for example, indexes Napalm Death's 1987 LP *Scum*, grindcore's blueprint. Crosses weren't the only thing black metal inverted. The Norwegian black metal's home-grown micro-label, *Deathlike Silence Productions*, branded its releases ANTI-MOSH. The sleeve of Mayhem's 1993 reissue of *Deathcrush*, ANTI-MOSH-003, goes further still. The battle slogan "NO FUN / NO CORE / NO MOSH / NOT TRENDS" frames a crossed-out picture of Morrisound engineer Scott Burns, taken from the grindcore album *World Downfall* by Terrorizer.[3] In its polemic, black metal lumped grindcore and death metal together—and rejected them as hedonistic for inviting movement.[4] But black metal wasn't alone in mixing up those two subgenres. They developed from similar punk and metal sources in the mid-1980s and widely conflated initially before they acquired their modern, stable identities in the 1990s—in no small part because grind couldn't adapt its forms to the production benchmark set by death metal.

In this chapter, I argue that the success of death metal's digitally enhanced production aesthetic helped to differentiate grindcore from death metal because it undermined a formal process that was ubiquitous on grindcore's foundational records. The label "grindcore" indexes a dichotomy at the heart of this formal process. Listeners are invited to move to metal grooves that systematically invite coordinated motion, only to be kicked out by blast beats that make sped-up punk guitar riffs near

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renegade "pit ninjas" who refuse to abide by them tend to face shunning and confrontation. Gabrielle Riches has studied the gendered and embodied dimensions of this practice from an ethnographic perspective. Riches, "Embracing the Chaos: Mosh Pits, Extreme Metal Music, and Liminality." Riches, Brett, and Spracklen, "Female, Mosher, Transgressor: A 'Moshography' of Transgressive Practices within the Leeds Extreme Metal Scene."

[3] Pearson, "ASK EARACHE: DSP = No Mosh, No Core, No Trends, No Fun." The design had formerly been featured image of Sandor LaVey, the founder of the atheist-humanist Church of Satan—another *bête noire* of the circle around Euronymous—who, at the time, insisted on theistic Satanism as the one true creed of black metal. Kahn-Harris suggests that "the 'Core' refers to hardcore," yet the specificity of the citation suggests the nearer enemy grindcore. Kahn-Harris, *Extreme Metal. Music and Culture on the Edge*, 44.

[4] As Sarah Chaker's survey of the two scenes shows, this abnegation of physical enjoyment still shapes contrasting attitudes. Compared to black metal acolytes, self-declared fans of death metal are significantly more likely to state that they enjoy "their" music because it compels them to move their bodies. Chaker, *Schwarzmetall Und Todesblei. Über Den Umgang Mit Musik in Den Black- Und Death-Metal-Szenen in Deutschland*, 358.

impossible to move to. I understand this formal process as being defined by gestures that invite or block the body's entrainment to rhythm, rather than by repetition and resemblance. Furthermore, the functioning of these gestures cannot be separated from the materiality of instruments and recordings. The relaxed micro-timing of the grooves and the disorienting disconnect between blast beats and punk riffs were essential to grindcore's formal process.

Thus, when the first generation of grindcore bands abandoned grindcore for death metal, the production-dependent gestures they left behind became citable as signifying "grindcore." The spread of death metal's production paradigm—engineered to project control at all moments—undermined the formal contrast grindcore had been founded upon. When erstwhile grindcore bands that crossed over to death metal re-recorded their earlier songs, they tactically re-compose riffs, eliminating or diluting the blast beats that formerly to interrupted grooving. In a concession to the even pulses and sculpted attacks of death metal production, these death metal re-recordings no longer frustrate bodies as they used to, even if their outer form—the number and succession of riffs—remains unchanged. This retrofitting thus revealed grindcore's inner form, a process assembled from gestures distinct from death metal's building blocks.

To make the case that the contradiction between formal process and production helped codify the difference between these sub-genres, I draw on several lines of scholarly inquiry. Recently, meter and rhythm in metal music have seen increased interest from scholars working in an embodied cognition paradigm. While these scholars focus on how embodied capabilities allow listeners to master difficulties in these styles, I take a different perspective. In line with scholarship inspired by Richard Middleton, I focus on how gestures build on or subvert each other, with grooves and their subversion

by blast beats creating "cycles of energy" that generate form.[5] From Anne Danielsen's scholarship on groove, I gleam the concept of "gesture," which she defines as "a demarcated musical utterance" within a virtual referential framework like the beats and meters induced in listeners. Compared to pattern or rhythm, "gesture" denotes materiality—a thick *thisness*, saturated with the inflections of a particular performance, player, instrument, production, and so on.[6] Beyond this material dimension, as a cornerstone of human communication, gestures are "synthetic gestalts with emergent meaning."[7] Combined in larger referential frameworks, these gestures can serve as analogs for dynamic processes that can be further specified through conceptual blends supplied by visual, lyrical, and social contexts.[8]

First, within the context of 1980s punk and metal intersections, I analyze the label "grindcore" as indexing a specific formal process. Second, I review current scholarship on embodiment and meter in metal and argue that theorizing extremity means theorizing failure. Third, through a close analysis of the clash between grooves and blast beats on Napalm Death's agenda-setting LP *Scum*, I develop a more concrete prototype of grindcore's formal process. Early grindcore bands interpret the loss staged by this process to symbolize political, corporeal, or historical losses. Fourth, I argue that the specific materiality of recording and performing grindcore in the late 1980s was integral to its original formal process, a fact revealed by the changes erstwhile grindcore bands make to re-recordings of earlier songs under the hegemonic production ideal of death metal.

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[5] Drawing on Middleton's work on form-as-process in popular music, Glenn Pillsbury analyzed Metallica's music as managing "cycles of energy" in modular song forms. Pillsbury, *Damage Incorporated: Metallica and the Production of Musical Identity.*, 21–22. Middleton developed his approach in the seminal Middleton, *Studying Popular Music.* and provided a refined application in Middleton, "Popular Music Analysis and Musicology: Bridging the Gap."

[6] Danielsen, *Presence and Pleasure: The Funk Grooves of James Brown and Parliament*, 47.

[7] Hatten, *Interpreting Musical Gestures, Topics, and Tropes: Mozart, Beethoven, Schubert*, 94.

[8] Zbikowski, *Foundations of Musical Grammar*, 124–27.

Label as history and form

In this section, I argue that the label grindcore can be read as a minimal theory of its central formal process. While the label's indexing of punk-metal hybridity has received the most attention, I suggest the bands that coined the term understood *grind/core* to designate contrasting types of motion: *grind*-ing heaviness and hard-*core* punk speed.

Punk and metal's disavowed entanglements

Commonly, the label "grindcore" is read as just one of many fusions of metal and hardcore punk. But reconstructing how grindcore designates specific sounds and processes requires some historical background. Grindcore, effectively, has two viable theories of itself: one punk and one metal. Yet relations between the genres' scenes can be tense and entail a complex politics of difference. As Kronengold notes, genres are always meta-genres that theorize the genres that relate to them. Therefore, left unexamined, the fraught relationship of punk and metal over time threatens to distort past nuances of meaning.[9]

The frictions of this relationship, and the "-core" genres, it spawned, radiate into mainstream discourse. Presently, the suffix "-core," originally drawn from hardcore punk, has emancipated itself from its host genre—and from music altogether. Consider "cottagecore," the name of a very online post-Millennial visual aesthetic centered on a longing for bucolic utopia and embroidery, shared in images and videos on social media. In this case, the suffix doesn't so much indicate a blending with punk (studded leather jackets and neon hair are antithetical to cottagecore) but rather a staunch commitment to a particular niche aesthetic. In the 2010s, this emancipated "-core" became a morpheme that could turn *anything* into a subgenre. Traumacore. Normcore.[10] The origins of this use

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[9] Kronengold, *Living Genres in Late Modernity: American Music of the Long 1970s*, 25.
[10] Jacob Reed has pointed me toward "corecore," which takes the "core as aesthetic" meaning of cottagecore to its

lie in the early 2000s. At the height of metalcore's success, metalheads who saw this success as an outside appropriation and dilution of extreme metal reacted with inflationary, ironic use of "-core," eventually emancipating its meaning.

As the fate of the "-core" morpheme shows, the memory of the crisscrossing influences between metal and punk is organized by the present meanings of subgenres. This curation retroactively severs and underplays past dependencies.[11] Consequently, grindcore is quarantined from death metal, both are quarantined from punk.[12] Lewis Kennedy's dissertation shows that even academic studies purify historical lines of influence between punk and metal, or do not factor awareness of these entanglements into their analysis of musical records.[13] Michelle Phillipov, for example, recapitulates Carcass' origins in the grindcore, but exclusively analyzes their songs from the vantage point of a contemporary death metal listener. As a result, she interprets catchy passages as an intrusion of mainstream popular music, while neglecting the political undercurrents of Carcass' gory imagery.[14] Skipping UK grindcore and its dependence on metal also renders later developments in hardcore obscure. David M. Pearson's *Rebel Music in the Triumphant Empire* focuses exclusively on US hardcore bands in the 1990s and subsumes grindcore as part of "extreme hardcore punk."[15] But the slow dirge/fast blast dichotomy Pearson

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logical conclusion: it refers to video and sound collages that epitomize a particular emotion or sensibility, from hope to (more frequently) doom. "TikTok's 'Corecore' Is Where Men Scream Their Anguish."

[11] A notable exception to this generic siloing is Steve Waksman's *This Ain't the Summer of Love*, which follows punk and metal's interdependence through the 1970s and 1980s. However, Waksman's narrative ends *just* before the codifications and technological disruptions that crystallized extreme metal's constituent subgenres.

[12] The divide seems to have grown over time, too—perhaps because in the age of the Internet, the target audiences for these publications of scenic memory formed around those labels, rather than in smaller, more interdependent scenes in the rather resource-scarce real world. Albert Mudrian's 2004 oral history *Choosing Death: The Improbable History of Death Metal & Grindcore,* revised an expanded in 2015/2016, still treated death metal and grindcore as an intertwined phenomenon. Ten years later, the interviews conducted and edited by Jason Netherton in Extremity Retained — Notes from the Death Metal Underground skew heavily towards the named subgenre, mentioning it nearly five hundred times. Grindcore, by contrast, is mentioned only nineteen times—although grindcore bands are cited as influences more frequently than that.

[13] Kennedy, "Functions of Genre in Metal and Hardcore Music," 121ff.

[14] Phillipov, *Death Metal and Music Criticism. Analysis at the Limits*, 70%.

[15] Pearson, "Extreme Hardcore Punk and the Analytical Challenges of Rhythm, Riffs, and Timbre in Punk Music."

observes has no precedent in 1980s US hardcore punk. Rather, it parallels the groove/blast dichotomy pioneered by Napalm Death and the UK grindcore cohort examined in this chapter.

Somewhat uniquely, the label grindcore pointed to a specific place and circle of bands from the start, much more so than death metal and black metal did. As names circulating in metal-becoming-extreme's networks, these two labels would stick to almost anything occult or gory initially.[16] By contrast, grindcore unambiguously originated in Birmingham, UK. The city was hit hard by de-industrialization. By the mid-1980s, private investors had picked the leftovers dry. The abolition of the commons fueled a less fashion-oriented, more anti-Thatcher-oriented generation of punk bands in the UK. The band Discharge, from ex-steel town Stoke-on-Trent, left an imprint on metal and punk alike. Discharge drilled themselves into the ears of metalheads with stark images of war and poverty, fuzzy distorted strumming, and a signature drumbeat—the D-beat, the Discharge-beat. Vice versa, the scene- and genre-crossing importance of Discharge opened up punk to the rumblings of harder-edged metal. Among Discharge's metal-inclined followers numbered Napalm Death, regarded as the undisputed originators of grindcore, at least as a term.

Some US-based bands that fused hardcore punk with metal, such as Siege and Repulsion, also ended up being also called grindcore. But this was an effect of UK grindcore getting significant media exposure in 1987. Once the term grindcore—and the sound shaped by Napalm Death and the tightly-knit circle of bands around them—was cast into the spotlight, the label gained currency stateside. BBC taste-maker John Peel invited Napalm Death on his show and had them record two "Peel sessions," features with fellow Birmingham bands Carcass and Bolt Thrower soon followed.[17] With the windfall

Pearson, *Rebel Music in the Triumphant Empire: Punk Rock in the 1990s United States*.

[16] Although black metal would become strongly associated with Norway. However, this was a *later* development.

[17] Notably, Peel, who died in 2004, was credibly accused of and admitted to sexual abuse. Public awareness and discussion peaked in 2012, as part of a wider reckoning with sexual abuse in the BBC. The 2016 edition of Mudrian's

from this exposure, Napalm Death's label, Earache, could fund more promotions—including the Grindcrusher tour covered earlier—as well as international distribution.[18] In 1991, *SPIN Magazine* featured grindcore as "breaking past the death-metal barrier."[19] The article captures the last moments of subgeneric messiness before death metal and grindcore settled into their modern meanings. To *SPIN*, death metal meant what is now considered the occult edge of thrash metal: Slayer and Hellhammer re-named rebirth, Celtic Frost. Faster, harder Florida bands like Death or Morbid Angel were labeled grindcore.

The form in grindcore's name

So, to return once more to the question Weinstein asked of heavy metal: what's in grindcore's name? I read grind/core as registering the two poles: the "grinding" sounds of heavily distorted, mid-tempo grooves, and the speed and political edge of hardcore. Grindcore's central formal process juxtaposes these two extremes.

That grindcore should have a characteristic formal process at all may be controversial. If for nothing else, grindcore is known for its short songs, like Napalm Death's second-long, record-setting "You Suffer" from *Scum*. But most early grindcore songs are meatier. Read attentively, the origin story of grindcore told in Mudrian's *Choosing Death* clarifies grindcore's historical origins and the materials deployed in its formal process. Mick Harris, who also named the blast beat, explains grindcore's

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Choosing Death still prominently features Peel's foreword (advertised on the cover, accompanied by a newly drawn portrait of Peel), perhaps out of respect for his immediate contributions to grindcore's success. Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 9.

[18] Distribution will come up again toward the end of the chapter again, since the stateside distribution of Napalm Death (and other grindcore bands) coincided with them inching their sound toward that their American death metal peers. The lack of commercially distributed releases in the US didn't preclude Napalm Death's direct influence on US bands like Terrorizer, who, like most bands, were avoid tape traders who got access to tapes *before* they were released on record. When Terrorizer's guitarist Jesse Pintado received a tape of what would eventually be released as *Scum*'s side A, he recalls realizing: "that' the way I wanna play." Mudrian, 53–54.

[19] Blush, "Grindcore: Our 1991 Feature on the Metal Subgenre - SPIN."

signification:

> Grindcore came from 'grind,' which was the only word I could use to describe Swans after buying their first record in '84," Harris explains. "Then with this new hardcore movement that started to really bloom in '85, I thought 'grind' really fit because of the speed so I started to call it grindcore.[20]

The metaphor of grinding condenses the harsh distorted timbres and ramshackle rhythms of Swan's 1983 LP *Filth*, saturated with unrestrained noise rarely heard in metal. "Grind," however, has another meaning. In the *SPIN* feature, Shane Embury explains grind as a British synonym for "thrash." In the US, "trash" was a catch-all term for the music that skaters—the thrashers—listened to. Not just what's considered "pure" thrash metal like Slayer, but also ultra-fast crossover bands like D.R.I. or Corrosion of Conformity. However, those bands would be classified as hardcore in Harris' British lexicon, much like the short sonic outbursts of the US band Siege. Where words fail, form and tempo help clarify fault lines.

Grindcore departed from hardcore punk conventions by introducing the possibility of a slow buildup, thereby signifying metal over punk.[21] Hardcore songs in the 1980s begin as fast as they get. Take Bad Brains' self-titled debut.[22] Its punk tracks plunge into full-speed ahead riffs with little fanfare: just a snare roll in "Sailin' On," or a unison lick and brief bass solo in "Banned in D.C." The slowdown comes later. Classic hardcore breakdowns, like the one in "Banned in D.C.", occur past the midpoint of the song and cut motion down to a half-time feel. US crossover thrash bands like D.R.I. also waste no time getting to warp speed. In sum, in the early 1980s, a preference for exclusively short songs typifies US punk and metal fusions more so than UK grindcore.

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[20] Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 27.

[21] Consider the accelerating lockstep march of Slayer's "Hell Awaits," which we covered earlier, the portentous slow first half of Celtic Frost's "Visions of Mortality" (*Morbid Tales*, 1984), or even the half-acoustic, half-distorted intro of Metallica's "Battery" (*Master of Puppets*, 1986).

[22] Also known as the Yellow Tape for the base hue of its Capitol-busting reggae flag cover. Bad Brains, *Bad Brains*.

By contrast, when Napalm Death accelerated its tempos in competition with fellow Birmingham band Heresy, they did so selectively. Guitarist Justin Broadrick recalls: "We simply sped everything up, apart from the slow breaks." As I analyze in greater detail below, this captures Napalm Death's evolution from their 1985 demo *Hatred Surge* to 1987's *Scum*, which saw the band put the punk-derived verse-chorus cores of their songs into hyperdrive. The metallic "slow breaks," or rather, slow introductions and breaks, remained untouched. With their stripped-down, palm-muted riffing, these slower sections recall European thrash metal like Celtic Frost, if with a danceable verve. Less interested in virtuosity and deprived of the recording budgets of their American peers, continental thrash was a hybrid style heavily indebted to Discharge-style punk in its own right—especially as far as drum figures were concerned. Broadrick sums up the grindcore formula: "We wanted to put together a mixture of Siege and Celtic Frost. We wanted that hardcore energy meeting slowed-down, primitive metal riffs, and to basically marry that to a political message."

This marriage of metal and punk was also extended to Napalm Death's visual aesthetic. The band commissioned artwork that assembled iconography drawn from punk and metal imaginaries, shown in Example 12. Jeff Walker, vocalist and bassist of Carcass, gave ghastly shape to Mick Harris' concept, which called for "a hierarchal thing with skulls at the bottom, starving kids, corporate logos, and businessmen as overlords."[23] Walker assembled this Reagan-era dance of death from snippets he cut out of Celtic Frost, Dark Angel, and Siege fliers. Emulated from Terrorizer's *World Downfall* all the way to present grindcore releases, this sutured altarpiece to the capitalist sublime still serves as the blueprint for grindcore's left-wing quarters.

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[23] Bennett, "Napalm Death's 'Scum': The Story Behind the Cover Art | Revolver."

Example 12. Front cover of Napalm Death's *Scum*. The collage assembled from punk and metal flyers blends capitalist and fantastic horror.

Let me pause here, for just a moment, and survey the conception of grindcore developed so far. Granted, the historically and locally specific significations of the terms involved are slippery. But under the shifting words, conceptual cohesion lurks, a theory of sound and its signification: a confrontation of slow and fast tempos, metal and punk, thematically oriented towards political reality.

To summarize, within the gravitational fields of 1980s hardcore punk and metal crossovers, different types of musical (and bodily) motion could gesture towards either pole of the crossover—and at multiple levels of the structure, as I show below. Close reading the label grindcore with members of Napalm Death, I made the case that it indexes a particular blend of thrash metal and hardcore, a form built from genre-signifying patterns of motion. Now, I will clarify how embodied engagement with metal is currently being theorized—and how analyzing the subversion of the groove in grindcore can counterbalance existing disciplinary biases.

Rhythm, analysis, and embodied limits

A growing amount of scholarship on meter and rhythm in metal takes an embodied perspective. While I consider this outlook productive, I also see three trends in this inquiry that—despite, or even because of, their non-traditional object—reflect the biases of music theory as a discipline. These inhibit theorizing extreme metal's different subgeneric instantiations as strategies of bodily frustration.

Disciplinary biases in the analysis of metal

First, existing studies focus on the complex and the exceptional at the expense of the foundational and the generic. Infamously, there are three major journal articles on the music of the progressive death metal band Meshuggah alone.[24] A slew of other articles focuses on progressive metal bands.[25] But when analysts discursively center complexity and non-normativity, they risk reproducing a discursive strategy observed by Robert Walser, which positions metal adjacent to Western art music.[26] On the other hand, just what is normative in major subgenres like grindcore remains under-theorized. Studies that focus on foundational and shared stylistic elements, by virtue of this orientation, tend to downplay subgeneric differences and focus on abstract repetition schemes.[27] Sub-subgenres seem easier to get a grip on. Following Michelle Phillipov's theorization of "technical appreciation and emotional distanciation" in Cannibal Corpse, Erik Smialek has theorized technical death metal—where the

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[24] Self-consciously described as a "school of Meshuggah analysis" by Olivia Lucas. Pieslak, "Re-Casting Metal: Rhythm and Meter in the Music of Meshuggah." Capuzzo, "Rhythmic Deviance in the Music of Meshuggah." Lucas, "'So Complete in Beautiful Deformity': Unexpected Beginnings and Rotated Riffs in Meshuggah's ObZen." This emerging mini-canon also generated and is generating a host of unpublished conference papers and thesis, as Hudson notes. Hudson, "Bang Your Head: Construing Beat through Familiar Drum Patterns in Metal Music."

[25] McCandless, "Metal as a Gradual Process: Additive Rhythmic Structures in the Music of Dream Theater." Kozak, "Feeling Meter: Kinesthetic Knowledge and the Case of Recent Progressive Metal." Garza, "Transcending Time (Feels): Riff Types, Timekeeping Cymbals, and Time Feels in Contemporary Metal Music."

[26] Walser, *Running with the Devil. Power, Gender and Madness in Heavy Metal Music*, 57–58.

[27] Elflein, for example, treats extreme metal as a subgenre in itself—rather than a field of subgenres. Elflein, *Schwermetallanalysen. Die Musikalische Sprache des Heavy Metal*. Elflein, "Slaying the Pulse: Rhythmic Organisation and Rhythmic Interplay Within Heavy Metal." Hudson, likewise, looks for shared rhythmic figures and repetition schemes across all of metal, treating subgenre as an epiphenomenon. Hudson, "Compound AABA Form and Style Distinction in Heavy Metal." Hudson, "Bang Your Head: Construing Beat through Familiar Drum Patterns in Metal Music."

"technical" denotes virtuosity, but not necessarily the refined ethos that invites the "progressive" label—as an aesthetics of disorientation.[28] Its complement is melodic death metal, whose marked—and thus legible—verse-chorus structures place it at the opposite pole. But as recognized sub-subgenres, both postdate the initial grindcore/death metal bifurcation considered here.

Second, current scholarship focuses on successful engagement with meter and rhythm in metal, neglecting the failures that allow listeners to enjoy extremity and empowerment in the first place.[29] For example, Mariusz Kozak marshals the wisdom of the flesh to domesticate ambiguities of progressive metal that could threaten the enjoyment of mastering the material:

> This high degree of ingenuity with regard to meter—one that engenders pleasurable feelings of playfulness and corporeal gratification for listeners who have learned to fluidly navigate metrical changes […] In this muddled terrain bodily responses often teeter on the verge of incomprehensibility yet manage to remain grounded. I argue that this ground is formed by the participants' culturally situated kinesthetic knowledge, their sense of what it feels like to move to music given this music's specific material, social, and cultural significance.[30]

Here, "kinesthetic knowledge," a bodily reenacting of learned generic norms, fashions the reliable ground that supports the listeners in even the most metrically messy passages. Stephen Hudson, who theorizes head-banging as an embodied practice of perception, likewise focuses on how it creates a communal experience and enacts meter in ambiguous stretches of music. While he does cover the blast beat, he exclusively treats it as a variant of the backbeat—despite its being too fast to entrain to on its own, forcing guitars or crash cymbal hits to supply higher metrical groupings that one could head-bang to.[31] Granted, enculturation at the sensorimotor level does help listeners navigate metric

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[28] Phillipov, *Death Metal and Music Criticism. Analysis at the Limits*, 77%. Smialek, "Genre and Expression in Extreme Metal Music, ca. 1990-2015," 172.

[29] The currency of scholarly publishing helps explain why difficulty is valued as an opportunity to display mastery. Capacious frameworks will garner citations, and theorists have long shared in the potency of the subjects they analyze.

[30] Kozak, "Feeling Meter: Kinesthetic Knowledge and the Case of Recent Progressive Metal," 187.

[31] Hudson, "Bang Your Head: Construing Beat through Familiar Drum Patterns in Metal Music," 129.

ambiguity in metal and beyond. But for extreme metal, that's a problem. Once your body knows "how that one goes," some extremity evaporates: the music no longer locks you out of spontaneous engagement.

Third, even if the goalpost of extremity shifts into vanishing infinities, theorizing extreme metal's subgenres *qua* extremity compels us to grasp tactics for cultivating this resistance—and how these tactics are inseparable from recording, production, and the materiality of sound.[32] Hudson comes tantalizingly close to theorizing the blast beat as a source of disruption when he quotes a fan review of an early demo by Death. Recalling comparisons I made in Chapter 3, these demos were notably faster than the band's studio albums. In no uncertain terms, the fan Hudson quotes values Death's early utterance for neck-breaker-riffs—that is, riffs that make head-banging hard or impossible: "Total neck-breaker-riffs shoot through me. The solo reminds me of the first Venom LP—complete chaos! The sound separates your skin from your bones, and your brain begins to cook…!"[33] I would take this testimony at face value. As we saw before, fans will describe heaviness and relentless pummeling—like on Death's studio albums *Leprosy* or *Human*—in terms that acknowledge the consistency of its overall gesture. By contrast, the undomesticated ruckus of the demo is the source of pleasure here. The chaos cannot be separated from production, a key factor in the arms race between extreme metal's subgenres and what their listeners are accustomed to.

I will theorize the kind of extremity that UK grindcore explored—a species of pleasure and frustration—as historically fragile in a way that is uncomfortable for music theory. A related, though

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[32] Ironically, the over-analyzed progressive repertoire hinges on the clarity afforded by digital production techniques. Without it, the polymetric cycles of Meshuggah wouldn't just be hard to make out or move to; they would also be harder to transcribe, at least in a fashion where the symbolic clarity of the transcription doesn't misconstrue the sonic messiness.

[33] Hudson, "Bang Your Head: Construing Beat through Familiar Drum Patterns in Metal Music," 124.

decidedly audience-focused concept is that of "stance," as a modality that shapes our engagement with musically structured time. Drawn from Harris M. Berger, Hudson uses it to sketch out a preliminary program for grasping what he calls stylistic, rather than subgeneric, difference in metal, contrasting the playful vamping of glam metal with the icy stasis of black metal:

> Styles are stances—not just semiotic symbol sets […] but also relative social distinctions that we participate in as we use these distinctions to imagine style categories and communities. […] Metal music moves through time in many ways, and as we experience that motion in listening, we imagine how both the music and ourselves fit within a diverse field of styles and values and communities, willing these categories and distinctions into (new or continued) existence.[34]

Yet stance is an audience-side, reception-focused concept—with the notion of gesture, I mean to capture not just how a stance can appropriate music, but also be denied such appropriation. Assembled from protean metal and punk elements, these canonic songs—spreads on records—build grooves only to level them in, a disruption gathers its force from the relaxed, live-tracked performance of the dance-able riffs as much as it does from the unbridled mess that ends the dancing. If grindcore has a stance, that stance's reception of a groove is meant to be swept off its feet—a gesture built from two irreconcilable gestures.

Formal process, groove, and frustration

I analyze the formal pattern of UK grindcore and argue that it is a form constituted by the function of its two types of motion: first, the body is invited into a groove, only to be ejected and forced to reckon with its limits in a blast beat barrage. Groove and blast sections are constituted by characteristic riffs and groups of riffs, comprised of guitar, bass, and drum parts. In groove riffs, these instruments work together, while in the case of blast riffs, they work against each other.

Since my analysis hinges on distinguishing between groove riffs and blast riffs, I will need to

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[34] Hudson, "Compound AABA Form and Style Distinction in Heavy Metal," 6.6.

specify what I mean by "groove," which is notoriously hard to define. Worse still, since the repetition of a pattern characterizes both grooves and riffs, their definitions can overlap.[35] Consider Zbikowski's definition of groove, which captures how riffs function in metal just as well: "a large-scale, multi-layered pattern that involves both pitch and rhythmic materials, and whose repetitions form the basis for either a portion or all of a particular tune."[36] Much of my analysis will focus on "material" aspects of grooves that can be enumerated: a regular beat subdivided to drive onward with syncopations, counter- and cross-rhythms, and microrhyhmic nuances. However, as Danielsen and other groove scholars emphasize, grooves are processes with an irreducible experiential quality.[37] Music psychologists commonly define groove as a "pleasurable drive to action,"[38] a view anticipated by foundational ethnomusicological work done by Steven Feld, who saw grooves as "working to draw the listener in."[39] This is a key distinction between an arbitrary series of riffs and riffs that develop a groove. To keep a groove—that is, someone in the groove—going, riffs cannot exhibit radically different patterns of motions.

Punk and metal offer a variety of regular and irregular ways of moving to sounding gestures: moshing, headbanging, two-stepping, skanking, and many more. Today, moshing spans punk and metal. But such intense embodied engagement among concert attendees can be seen as a belated introduction to metal. Even head-banging, often taken for granted as a universal practice in metal, has a history. Waksman argues that US metal fans didn't always head-bang and that the practice was a

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[35] Grooves and riffs are "autotelic," that is, they "lead the listener to expect its beginning to follow its end." Turnarounds play a key role in this. Hughes, "Groove and Flow: Six Analytical Essays," 15.

[36] Zbikowski, "Modelling the Groove: Conceptual Structure and Popular Music."

[37] Schmidt Câmara and Danielsen, "Groove," 276.

[38] Janata, Tomic, and Haberman, "Sensorimotor Coupling in Music and the Psychology of the Groove."

[39] Feld, "Aesthetics as Iconicity of Style, or 'Lift-up-over Sounding': Getting into the Kaluli Groove," 76. Feld's research developed in close collaboration with Charles Keil, who coalesced around theorizing the groove. Keil and Feld, *Music Grooves: Essays and Dialogues.*

European import—which coincided with a greater focus on embodied engagement in punk. Before the success of thrash metal, stateside metal fans would pump their fists and stand in place. Heads only began to be banged on both sides of the pond in the mid-1980s, paralleling the rise of slam dancing—another word for moshing—in punk scenes.[40] Crucially, moshing and slam dancing represent decidedly aperiodic movements, a spinning-out-of-control incommensurate with the pendulum-like regularity of fist-pumping, head-banging, or two-stepping. Thus, the dialectic of control and letting loose—of metal and punk—asserts itself not just in sound, but also in movement to sound.

The participatory quality of groove has ramifications for identifying just what makes a riff or a section groovy. Since grooves exist as a "music-to-feel" relationship, not everyone will be drawn into the same music, as Tiger Roholt points out.[41] A fan of grindcore may not "feel" a funk groove, consequently, a funk groove—in its full sense—may not exist for her. But this music-to-feel relationship also holds locally, within genres and songs: if you struggle to move regularly to forbiddingly fast subdivisions and out-of-control dynamic balances, a section where a richly elaborated meter affords such entrainment will feel even groovier. Hence, my definition of groove riffs and sections will be contextual—they are defined by letting listeners move in ways that blast riffs don't.

In the case of early UK grindcore, groove—as a dynamic, engaging process—establishes a baseline that is then disturbed by being overridden by gestures that are too fast, too irregular, and too self-similar to afford to groove along. Using the groove as a center of gravity is not unique to grindcore. Middleton highlights the importance of genre-specific grooves in anchoring a song's small and large gestures. Grooves, according to Middleton, "produce a gestural centre or 'given', around which many

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[40] Waksman, *This Ain't the Summer of Love: Conflict and Crossover in Heavy Metal and Punk*, 278–79.
[41] Roholt, *Groove: A Phenomenology of Rhythmic Nuance*.

popular songs orientate themselves."[42] At a small scale, minor alterations to an established pattern may call into question the inferred grouping *just* long enough to draw one back into the familiar. But what defines grindcore is how it cuts off the groove. At the largest scale, the termination of a groove that has been entrained and moved to untethers the song. Grindcore, with its two poles, is defined by both the local tactic of cultivating groove and the formal strategy of sabotaging it.

Frustration as form and meaning

Having reviewed how meter and rhythm are being studied in metal, and armed with a working definition of groove, riff, and gesture, we now return to the theory of grindcore reconstructed from its name. The clash between groove and blast—grinding of a higher order—was grindcore's central formal process, staging temporary failure and frustration. I now substantiate this theory with close analysis of how a song from Napalm Death's debut LP *Scum* cultivates a groove and subsequently frustrates it. This formal pattern embodied grindcore's political critique of the emerging neoliberal order drastically. The instrumental groove sections invite coordinated motion like headbanging, a potentially communal pleasure in meter that is dashed by the wash of drums and riff fragments in the blast sections—which coincide with barked left-wing lyrical critique. While some bands, like Terrorizer, appropriated both the form and its political meaning, others, such as Carcass or Bolt Thrower, gave a different semantic nuance to this enactment of pleasure and denial.

Napalm Death's groove/blast blueprint

Napalm Death's *Scum* set a new benchmark in sonic extremity and codified a formal process that could sustain dozens of early grindcore songs. This was in spite of the album's complicated genesis. When Napalm Death recorded *Scum*, the band was in flux. The two sides of the LP were assembled from two

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[42] Middleton, "Popular Music Analysis and Musicology: Bridging the Gap," 181.

separate, EP-length studio sessions recorded in 1986 and 1987, with only drummer Mick Harris playing on both. While Harris contributed to songwriting beyond drums, the rotating roster makes the prominence of one recognizable formal pattern—the alternation of groove and blast sections—all the more striking.[43] Although side B moves towards shorter bursts, its longer songs elaborate a groove with elaborate interactions between drums and guitars—before strumming and kicking ahead into sections where blast beats threaten to detach from or drown out the guitars altogether. This contrast, which affords and frustrates coordinated movement, defined the songwriting of the first generation of grindcore bands following in Napalm Death's footsteps.

Consider *Scum*'s first song, "Instinct of Survival," which follows the instrumental noise-inspired collage "Multinational Corporations." Example 13 transcribes its riffs, with both guitars and the bass combined into one system. For now, I omit minor variants of riffs, as well as their order and number of repetitions. At the highest level, I distinguish between groups of "groove" and "blast" riffs. In my transcription, stems indicate rhythmic groupings that go against the overarching 4/4 feel of the song. The groove riffs, a, b, and e, are propelled by a regular alternation between the back-beat-supported duple meter and D-beat-supported 332 groupings, stemmed accordingly. Balance is key: neither possibility of filling a measure takes precedence. The blast riffs, c and d, on the other hand, are characterized by rhythmic disconnection. Barely coordinated with the short guitar riffs, Mick Harris' non-stop blasting features no repetitions larger than the kick-snare alternation under a particularly rowdy ride cymbal. No transcription could do this justice, of course—but I gesture towards this underdetermination with uninterrupted stemming.

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[43] I survey further albums in this section's final subsection.

Example 13. Transcription of groove and blast riffs in Napalm Death, "Instinct of Survival." The "groove" riffs invite coordinated movement with richly differentiated meter—while the "blast" riffs use an abundance of repetition, rapid subdivisions, and playing techniques that blur points of attack to frustrate it.

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Between riff a, b, b', and e, which one constitutes "the" groove? With the definition of groove as process from the previous section in mind, the answer is: all of them, by virtue of how they flow into each other for the listener. The riffs resemble each other like a series of variations, changing gradually enough to not disrupt the listener being drawn into the groove they develop. "Instinct of Survival" recombines simple materials in a tactic characteristic of other grindcore grooves. Riff a, played four times, with the right-panned guitar track entering after the first two repetitions, establishes the rhythmic and pitch scaffolding for the groove. The palm-muted eighth-note "chugging" establishes the groove's density referent for the listener, a virtual reference structure that regulates the shortest duration at which events take place.[44] Wound up like a coil, the chugging releases itself as an upbeat to the drum-accented power chords that divide the riff into a 2+2 period. These power chords introduce the location of the "diatonic" division of the 4/4 measure, likely inviting the first—if interrupted—head-banging to this song. The power chord roots, paired in semitones as F/F-sharp and G/A-flat, also introduce the pitches that complement the open-string tonic D drone of the groove. While "dronality" is common across metal, grindcore grooves stick unusually closely to that single center—which makes them all the groovier.[45]

After a measure-long blast beat fill that functions as an extended upbeat, a typical grindcore groove emerges. Combining heavy chugging and shuffling punk playfulness, riff b and its variant b' disambiguate and deepen the duple/diatonic grouping alternations. Harris' drumming regularly alternates between backbeat and D-beat patterns, driving onward without discharging into foursquare

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[44] Nketia, *The Music of Africa*, 126.
[45] Dronality, which Daniel Harrison studies as a strategy in tonal Western classical music composed after the end of obligatory tonality, captures how drones can "produce deeply embedded, immovable, and solid tonic anchors" even when surrounded by chromatic material—as they usually are in metal music. Harrison, *Pieces of Tradition: An Analysis of Contemporary Tonal Music*, 16.

accent patterns. As Robin Attas points out, the backbeat can be heard as polyphonic—it has two distinct rhythmic streams, or voices, distributed between kick and snare.[46] Shown under riff b's system, the D-beat introduces a fleeting 332 counterpoint in the kick, leaving the snare's voice unaltered. The guitars meet this pattern with groups of three eighth notes—tresillo figures—which trail off, again and again, into neutral chugging.[47] Activity peels out of the palm-muted pulse relaxedly, eschewing the strong, first-beat power chord accents common in thrash metal riffs while also not letting the quarter-note pulse layer drop off unexpectedly or for too long.

While other examples achieve a groove by different means, grindcore grooves inevitably establish a deep meter that provides multiple levels the listener can entrain to. Most important is a beat that can support leg- or head-based swaying. Some of the rhythmic streams that establish this referential frame add dynamism with periodic, predictable syncopations and counter-rhythms.[48] We can observe further repeated grouping alternations in the fills that mark the highly self-similar parts of the riffs. Mid-riff, Harris plays a 4/4 snare-tom run under the guitar tresillo, at the turnaround, the run follows the tresillo's lead. Outwardly, these turnarounds resemble what Hudson calls the phrase-ending 332.[49] But the 332 pattern is too ubiquitous to signal closure in "Instinct of Survival." The regularity between a backbeat and a 332 pattern is the metrical ground of the groove, predictable in its equilibrium.[50] Within the entrainable 4/4-332 back-and-forth, rising pitch material introduces a

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[46] Attas, "Meter as Process in Groove-Based Popular Music," 38.

[47] That these tresillos trail off, rather than resolve, is significant: it makes them less disruptive than a 332 pattern that strongly emphasizes the first beat of the following measure. Analogously to the Pythagorean comma, Richard Cohn describes the non-3, but near-3 "2" as a "comma." Cohn, "A Platonic Model of Funky Rhythms." These ambiguously ending tresillos are a class of their own, distinct from longer cycles, like 333322, as heard, for example, in Nobuo Uematsu's *Final Fantasy VII* battle theme "A Merc's Job."

[48] Danielsen uses "counter-rhythm" to designate grouping alternations that do not give rise to persistent cross-rhythms. Schmidt Câmara and Danielsen, "Groove," 279.

[49] Hudson, "Bang Your Head: Construing Beat through Familiar Drum Patterns in Metal Music," 130.

[50] That every groove riff varies variation agreed-upon pattern also indexes the fact that grindcore bands would develop songs by "jamming" on a single riff—as we will see in the second case study of this chapter.

dynamic element. Riff b' transposes the tresillo figures of riff b, F and F-sharp up a whole tone, to G and A-flat, the roots of the power chords heard in riff a. The turnarounds, too, rise—first, to a stable D, then to an unstable E-flat. With its surf-rock-lie twirling, the melody pulls the catchy variety-within-predictability rhythmic pattern higher.

The formal debt owed to Discharge

Unlike other grooves that seek to sustain infinite present, grindcore grooves often suggest directed motion somewhere. That somewhere is the blast section, where the movement initiated to the groove becomes near impossible to maintain amid multi-parameter mayhem. Paradigmatic early grindcore songs like "Instinct of Survival" thus exploit the groove as a "state of being." If you're in a groove, you don't want it to end. That enjoyment is a trap. Like Mephistopheles would serve his contract, grindcore cuts off the groove as a beautiful moment, a hard cut into blast beats that nearly drown out a blur of vestigial guitar riffs. The harshness of this change is the point. At most, it is mediated by a short break, as is the case on the track "Scum," which momentarily teases a guitar riff you *could* move to, before chopping that riff up with blast beats.

"Instinct of Survival" takes a more straightforward plunge into the sonic wall. Riffs c and d immediately sabotage coordinated movement, precisely by shunning coordination and dynamic balance between guitars and drums. The guitar's wash of tremolo-picking and whammy-bar wailing lacks clear attacks, while the drum's blasting eschews crash hits or dynamic accents. The stolid tonic drone is cut off, too, and the entire blast section avoids the tonic pitch altogether. This harmonic immobility is the norm and will be illuminated by the origins of these sections. However, the prior entrainment to the playfully animated beat of the groove radiates out into this hostile stretch. To entrain is to keep an outside event going internally. If one keeps moving to that prior beat, swaying to

the quarter-note pulse, those movements no longer fit onto what grindcore's blast section provides. In its sonic slurry, the best bet for targeting bodily motion is the latter half of riff c. Yet the blurry contour of the guitar parts, mercilessly punctuated by snare and cymbals, threaten to cause one to stumble. The listener's grooving is frustrated, if only temporarily. Eventually, the groove returns with riffs b and b' before riff e ends the song with a new elaboration that combines half-time-feel accents with a descending, cadential turnaround. Notably, the frenetically growled vocals only enter with the blast section, but then continue into the groove. I take up how words specify the sonic pleasure and denial between groove and blast in the next section.

Form in the first generation of grindcore bands is based on this contrast rather than any repetition scheme. The dichotomy of enjoyable, developed grooves and the acid bath of all-out blasting could be developed in myriad ways. Example 14 shows the paradigmatic opposition across multiple parameters. Glossing the form of "Instinct of Survival" as ABA', an introduction, a repeated verse-chorus unit, and a partial repeat of the introduction with a playout isn't wrong *per se*. But focusing on repetition misses the function of form in grindcore: the radical alterity of groove and blast sections, and how they maul popular music conventions that, at the time, had rarely been abandoned altogether in metal music. Rather, I aim at something akin to William Caplin's theory of formal functions. In many styles of music, common formal parts of larger music spans—such as a sonata, or a theme—employ distinct rhetoric and schemata in beginnings, middles, and ends. A listener familiar with Mozart's style may know what just-before-the-end-of-an-exposition sounds like, even if she hears it out of context.[51] When verse and chorus lack intelligibly enunciated lyrics and appreciable musical

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[51] While Caplin initially presented functions as parts and kinds of themes and extra-thematic functions in *Classical Form*, he later generalized these functions according to beginnings, middles, and ends at multiple levels. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. Caplin, *Musical Form, Forms & Formenlehre: Three Methodological Reflections*.

contrast—as is the case in so many grindcore songs that, on paper, have them in their blast sections—the meaning of the labels evaporates. There's no verse-ness and chorus-ness in grindcore, and groove and blast capture the local gestures and their clash more accurately.

	Groove	Blast
Meter	Deep, activity at multiple adjacent levels	Shallow, activity at disjunct levels
Pulse grids	Align	Don't align
Riff length	Long (4/8/16 measures)	Short (1/2 measures)
Turnarounds and fills	Frequent and elaborate	Rare and simple
Drum rhythm patterns	Back beats, D-beats, and parallel playing	Blast beats, sometimes preceded by a break
Guitar rhythm patterns	Non-disruptive syncopations and triple-grouped counter-rhythms	Accents on beats, overwhelmingly duple grouping
Drum/guitar interplay	Elaborate, go in and out of parallel accents	Minimal, few accents shared
Guitar techniques	Diverse, clear onsets (downstrokes/palm-muting)	Homogenous, blurry onsets (tremolo-picking/unmuted)
Pitch material	Likely entered on a repeated, open-string tonic pedal (dronality)	Tonic likely avoided, more diverse temporary pitch centers
Dynamic balance	Balanced, instruments give each other space	Snare and cymbals overpower everything
Vocals	Less common, at least during initial groove	Obligatory, part of the overwhelming texture

Example 14. Contrasts between groove and blast sections.

Napalm Death developed this contrast by escalating what used to be verse-chorus units into blast sections, as the evolution of their songs from 1985 to 1987 reveals. While Napalm Death's first recording of "Instinct of Survival" on the 1985 demo *Hatred Surge* retains the guitar riffs and repetition scheme of its latter incarnation, the changes made to riffs c and d transform the impact of both this

section and its groovy framing.[52] Most notably, Mick Harris plays an elementary D-beat pattern—without the subdivision of the first kick hit—under the two strummed riffs. Furthermore, instead of hoarse growls, the lyrics are performed in a punk shout. No longer a whirlwind, riff c more clearly registers as a verse preceded by four instrumental bars, while riff d grounds a chorus with backing vocals. Finally, the E-standard-tuned strings of the demo cut through the garage production with an edge that the laxer, D-down-tuned strings of the *Scum* version gave up for added heaviness.

Combined, these alterations to rhythmic density and timbre reveal the earlier "Instinct of Survival" version as a Discharge-style song flanked by metal riffs—identical in its repetition structure, but with the repeated parts functioning very differently. The shorts riffs and uniform drum pattern, devoid of turnarounds and fills that structure larger cycles of recurrence, replicate the temporal design of most songs on 1982's *Hear Nothing, See Nothing, Say Nothing*.[53] Discharge's two-riff songs were claustrophobic by design. Their brief verses into choruses that are little more than shouted slogans. Napalm Death radicalized this formula. The blast beat contracts beyond what a listener's body could entrain to. Just like Birmingham's post-steel decline was preceded by decades of middle-class comfort, the rhythmic deprivation in grindcore's blast sections terminates a pleasurably extended and embellished grooves.

Reinterpretations of the frustrating groove/blast form

The flexibility of the groove/blast frustration allowed early grindcore bands to develop distinct stylistic and semantic spins on it. I admit that it can appear a bit general: all of the constituent features listed above occur across metal and punk, and beyond—except for the blast beat, at least in the late 1980s. Moreover, a blast beat not yet controlled and equalized by the digital, dynamically and temporally out

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[52] Napalm Death, *Hatred Surge*.
[53] Discharge, *Hear Nothing See Nothing Say Nothing*.

of balance. What makes the groove-blast frustration gesture salient is that all of these bands would end up abandoning it once they began to record in the new death metal production paradigm. This amounted to writing out blast beats, introducing more gradual shifts of motion, and dulling the once-foundational contrasts.

With these disclaimers in mind, the groove-blast frustration—in its strongly polarized form—dominates the records that brought grindcore to the attention of a broader audience. On Napalm Death's *Scum*, 18 out of 27 songs (or 28, counting the intro) build up a groove before launching into blast beats. Only the shorter songs start with blasting. A similar ratio obtains on Terrorizer's *World Downfall*, with 9 out of 14 of the long—by grindcore standards—songs establishing and elaborating grooves before blasting. Recalling the California band's thrash neighbors, some of these grooves start with faster skank beats. For example, the opener "After World Obliteration" offers a skank introduction to a groovy riff that alternates between duple and diatonic patterns every other measure before launching into ultra-short Discharge-style blast riffs. Other groove/blast songs, like "Fear of Napalm" or "Ripped to Shreds" begin with instrumental mid-tempo grooves. Songs that begin with blasting, like "Corporation Pull-In," temporarily release listeners into upbeat, syncopated riffs.

Elaborating the Napalm Death template with more riffs per song, Bolt Thrower doesn't write any such condensed utterances. Drawn-out grooves that develop and even accelerate into blast beats dominate their first two albums. On 7 out of its 9 songs, 1988's *In Battle There Is No Law* grooves towards blast beats, even if the boomy kick drum defangs the latter by swallowing the snare. The snare bites again on the 1989 follow-up *Realm of Chaos: Slaves of Darkness*, 9 out of 10 songs (not counting the intro and outro) groove into blasts. Carcass, on *Reek of Putrefaction*, sometimes split groove and blast sections between two tracks, such as with the opening "Genital Grinder" and "Regurgitation of

Giblets." While many songs contain more and briefer sections, other songs—like "Pyosisified (Rotten to the Gore)"—stick to the basic template laid down by Napalm Death.

As is evident from these varied song and album titles, the denial and recovery of the groove can be used as an analog for various other processes suggested by lyrics and imagery. However, while the earliest grindcore bands blend their sounds with political, anatomical, and historical concepts, shared patterns emerge in how lyrics are mapped on the sounding gesture. Grindcore's formal-somatic critique inverts the normative libidinal economy of verse-chorus song forms, retaining it more on paper—a lyric sheet is absolutely necessary to follow the words—than in substance. The verses are not discursive; the choruses are not catchy and dance-able. Instead, in "Instinct of Survival," an instrumental introduction extrinsic to the atrophied verse-chorus core hooks you—while the blast section flies off the hook, taking you with it.

We have already encountered the political version, practiced by left-wing bands such as Napalm Death or Terrorizer. The blast section's lyrics typically portray malign, destructive forces beyond the individual. Over riff c, the verse "Instinct of Survival" describes the machinations of corporations that sell products produced at the expense of the indigenous populations of former colonies: "Advertise the product you make / never give and always take / clingfilmed flesh and genocide / contented life while millions die." Riff d carries the titular chorus, the selfish impulse that renders consumers complacent to the cost of comfort. When the formerly instrumental groove riffs b and b' return, they do so with anti-colonialist, anti-capitalist lyrics that now call out enjoyment: "The multinational corporation / takes its profits from the starving nations. / Another product for you to buy / you'll keep paying until you die." Thus, the relief of having passed through the blast hurricane is soured with guilt—and the loss of control radiates into the re-entry into the groove.

Equally left-wing in their personal outlook, Carcass and Bolt Thrower express these sentiments in a more metaphorical register, inching them closer to metal's orientation towards the fantastic. As committed vegans armed with medical knowledge, Carcass made meat consumption unpalatable—by reminding listeners of their fleshly fragility, a decidedly anatomical spin on the gore topics introduced by Repulsion.[54] "Pyosisified (Rotten to the Gore)" describes the formation of pus ("pyosis") and decay in the second person over the groove and its development: "Your cavities rot with ulcers / Your infected inflammations torn / Your gizzards eaten by incursive decay / You're infernally rotten to the gore." By contrast, the total loss of the body at the hands of a first-person cannibal specifies the blast beat's intrusion: "Juices digested from each pus-swollen pore / Insatiable hunger as I feast on the gore." Michelle Phillipov also notes the ambivalent potential for identification offered by Carcass's grammatical use of first- and second-person interpellation, writing that "the alternating establishment and disavowal of identification constructs listening subjectivities as fractured and ambivalent."[55] Ultimately, for her, the disruption of convention articulates no coherent political program. For Phillipov, convention means popular music and verse-chorus structures: her exclusive focus on death metal listeners and listening neglects hearing Carcass against what is normative in punk and grindcore—including dancing and professing politics.

Where Carcass celebrates close-up corporeal immersion and extraction to discourage eating animals, Bolt Thrower zooms out to the epic panorama of historical and fictional battles. "World Eater," from 1989's LP *Realm of Chaos*, takes inspiration from the tabletop strategy game franchise

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[54] The ambivalent, "don't hide your politics, don't make them obvious" attitude expressed by Bill Steer, who left Napalm Death to found Carcass, aptly captures the band's location between grindcore and death metal. "It's strange to be influential in that way though. Especially because on the surface, the early stuff is underground grind. It doesn't scream 'we are militant vegetarians' but it's true that many people who got into the band started to see something beneath it. It didn't take too much effort to see that we had, not an agenda, but we are definitely not pro meat."

[55] Phillipov, *Death Metal and Music Criticism. Analysis at the Limits*, 70%.

Warhammer 40,000. The source material's martial premise is aptly summarized by its tagline: "In the grim darkness of the far future, there is only war." Beginning with an instrumental groove, "World Eater" mirrors "Instinct of Survival," with the blast section set to words that describe the trepidation before and unfolding of a cataclysmic battle. Once the groove begins to return, the second-person soldier accepts his demise as inevitable. In the next section, I make the case that the sonic cataclysm that made this mapping so vivid was, in part, premised on audible limits of equipment—and that this aspect of the grindcore gesture was called into question by death metal production's triumph, which this roster of bands adapted to after 1989.

Production drives reinterpretation

In this section, I argue that the fate of grindcore's groove/blast gesture clarified how the subgenre differed from death metal—especially in retrospect, when bands retrofitted erstwhile grindcore songs to the ascendant death metal production aesthetic. This new production ideal explains the tactical alterations that grindcore bands make to re-recorded versions of their songs. Most of the early grindcore bands ended up re-orienting themselves towards styles that fans now describe as "death metal"—and re-wrote the former blast sections of earlier songs, among other modifications that accommodate the orientation towards clarity and control.

Maximalism and materiality in Bolt Thrower

My analysis pursues a formal and a historical point. I analyze "World Eater" as a maximalist take on the grove/blast gestures pioneered on *Scum*—and as a model case that demonstrates how the acuity of the groove/blast contrast was sharpened by equipment and recording practices inimical to the surgical clarity death metal strove for. After analyzing this song's groove in detail, I compare the original 1989 recording of "World Eater" from *Realm of Chaos* with its 1994 re-recording, from the *… For Victory*

sessions.[56] Colin Richardson engineered both records, with the same band lineup. This comparison allows me to specify how the historical constellation of instruments and recording techniques was integral to the original effect of the groove-blast gesture.

The "World Eater" groove balances forward momentum and enthralling repetition at a much larger scale than that pursued by Napalm Death, even if the basic means are the same. Example 15 shows the riffs of the expansive, instrumental groove that opens "World Eater," which gradually accelerates over the initial two minutes of the nearly five-minute song. The groove's closely-related riffs emerge from a primordial chugging, as if improvised on the spot.[57] Breaks that have the ensemble coalesce around a newly introduced variant, as well as flexible tempo and micro-timing, further enhance the impression of quasi-live creation from.[58] After the pulse, the section uses three riffs—a, b, and c—arranged in an arc-like abcba repetition scheme. Each riff successively intensifies riff a. Melodically, they elaborate a rise and fall from A, largely in steps. Each variant shifts familiar pitch events to new metric positions and adds new turnarounds. Towards the center of the groove, these added turnarounds reinterpret existing boundaries and increase activity and hypermetric accents beyond riff a's ambiguous baseline.

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[56] Bolt Thrower, *Realm of Chaos: Slaves to Darkness*. Bolt Thrower, *Who Dares Wins*. The re-recording was included on the compilation *Who Dares Wins*, released against the will of the band after a falling out with Earache. Bolt Thrower.

[57] A gesture that typifies Bolt Thrower as much as searching, Beethoven-Nine-style openings define Bruckner's symphonies.

[58] Indeed, the band did arrive at a new song by jamming on the concluding riff of "World Eater." Recalls drummer Andy Whale in *Disposable Underground #3*: "we've made a song up in the studio as well […] you get into the rhythm of what you're actually doin'. […] Baz [guitar] just came up with, you know, a riff, an' we went from there." (Note, by the way, the stylized British accent transcribed by the American reviewer.) That riff, which places an E-flat power chord on the first quarter note of the pulse on A, opens not only "Cenotaph"—a model for Bolt Thrower's later, blast-less groovy death metal style—but one song on each subsequent album, for a total of seven.
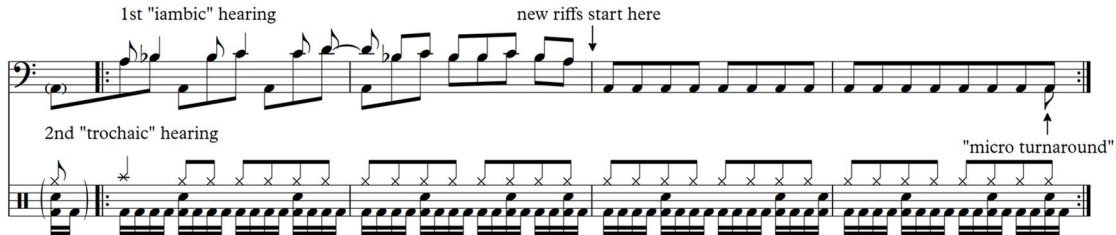
Example 15. Pulse and groove riffs in Bolt Thrower, "World Eater." From *Realm of Chaos* (1989).

Riff a toys with duple and tresillo alternations, but now leaves enough space to allow for the epic development Bolt Thrower aim form. The riff is introduced by a pure palm-muted groove, set apart by its impossibly low tuning and always a tad behind other rhythmic events. (More on this shortly.) The metrically neutral chugging is divided by drum fills that accent every other—and now perceptible—measure. The melody that peels out of this pulse initially suggests a "iambic" hearing, which I stem above the note heads. The guitar gesture conflicts with the metric figure the drums suggest. Drummer Andy Whale plays a backbeat over a double bass roll carpet but shifts to a syncopated pattern ever other measure. On the final eighth-note of the riff, the snare can be heard as part of a micro-turnaround. This accent makes it possible to hear a "trochaic" grouping in the melody, now beginning with the snare-reinforced low A chug. But this eighth-note shift melts back into the

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ambiguous pulse. Transient and below the most likely unit of entrainment—the back beat—it drives the listener deeper into the groove.

At a hypermetric level, riff a's ambiguous pulse ending occasions another re-interpretation that listeners can keep moving through. Eventually, riff a's unison melody is doubled at the fifth above in a gradual preparation of the fifth-power chords in riff b. That new riff is introduced with the drums dropping the beat for a break—and earlier than expected, at the point shown in riff a. Before, the pulse sounded like the end of riff a. But reinterpreted by riff b's entry, the pulse is revealed as riff a's beginning. The original entry of the drum beat under riff a was deceptive.

From here on, the drum beat no longer drops out. In combination with the turnarounds added by riffs b and c, rhythmic intensity rises while ambiguity fades. Riff b rhythmically condenses the stepwise arc from A to C and back again, creating space for its repetition within the riff—and a turnaround. Riff c condenses the melodic motive further, decorates C with an upper neighbor, and makes space for *two* turnarounds that target A with Phrygian B-flat power chords, now accented by cymbal hits. At the center of the groove, the drone-reinforced tonic A receives two accents per riff— before the groove loops back through riff b to riff a, baring the open-string A pulse once more over an unceasing drum pattern. Not like this pulse needed exposing. Even when its near-absent in riff c, it is easy to hear and feel internally, set apart from the ebb and flow of the upper voices by its relaxed attack and unique timbre, welded to a rhythmic grid of its own.

Some of the consistent and micro-timing discrepancies that give the grooves on *Realm of Chaos* their heavy, yet laid-back flavor originate with the equipment used rather than the players. Indeed, it may have asserted itself against the intentions of the players. Infamously, the band tuned down to A on *Realm of Chaos.* On ordinary guitars, fitted with strings of an ordinary gauge (that is, thickness),

this results in low tension: "the strings were like spaghetti," as bassist Jo Bench recalls with some regret.[59] Strumming or plucking, especially of open strings, produced a lax sound and input signal, further softened by amplifiers meant to receive electrical impulses rich in high frequencies. Thus, despite being palm-muted, the low A eight-note pulse sounds blunted and late compared to higher notes, which receive extra tension from being shortened by fingers on the fretboard.

Example 16 compares the onsets of the first, guitar-and-bass pulse-only pulse on the original recording of "World Eater" with those on the 1994 re-recording. The late version is tuned and transposed up to C-sharp, a modification that all by itself achieves crisper onsets. When *Realm of Chaos* was recorded, baritone guitars and thick strings were not widely used in extreme metal. Once more, Morbid Angel led the pack. The video for 1993's B-flat tuned "God of Emptiness" received airplay on MTV's *Headbanger's Ball.* The camera prominently zooms in on the talisman that conjures the razor-sharp B-flat dirge riffs: a seven-string guitar, with an additional, thicker string a perfect fourth below the customary low E string. Today, guitars that can hold the tension for these tunings are cornerstones of contemporary metal subgenres that require extreme downtuning *and* crisp attacks, from nu metal to the Meshuggah-inspired djent. Down to its very timbre and timings, the 1989 version of "Bolt Thrower" thus records a constellation of aesthetic attitudes and equipment about to pass away.

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[59] "Jo Bench Interview by Chazz and Lork K Philipson for Global Domination."
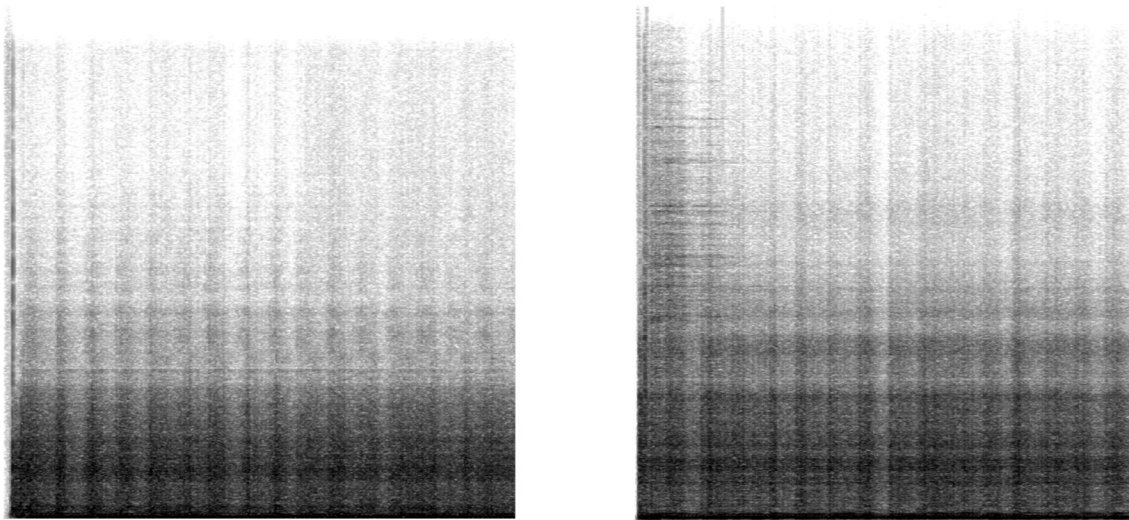
Example 16. Spectrogram comparison of guitar/bass pulse in the 1989 recording of "World Eater" (left) and the band's re-recording from the 1994 …*For Victory* sessions (1994). The latter features audibly (and visibly) crisper transient attacks—a combination of instrument, tuning, signal processing, and mixing.

The fate of blast sections in re-recordings of grindcore

The grindcore gestures I have tracked in this chapter did not make it into the 1990s unscathed. They were tied to production standards that seemed terribly outmoded, including to grindcore bands. In the wake of death metal's success in the early 1990s, Napalm Death, Carcass, and Bolt Thrower ended up abandoning the polarized groove/blast contrasts. Although the poles moved closer to each other, one had to give more than the other. Groove riffs remained largely untouched, aside from tighter timings and timbres achieved with tracking and processing. Rather, it is the blast sections that most clearly reveal changing demands in the studio and aesthetic attitudes. When these bands re-recorded their earlier songs, they eliminated or diluted the blast sections. Thus, these self-covers—erstwhile grindcore bands re-recording their earlier material through the subgeneric lens of death metal and its digital tools—clarify how the gestures that made up grindcore's initial formal process were shaped by what could be recorded and perceived in an earlier, analog media ecosystem.

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Bolt Thrower's strategy in the 1994 re-recording of "World Eater" is paradigmatic, a set of tactics that transform a grindcore track with a relaxed groove and chaotic blast section into a precisely pummeling death metal track. Beyond the difference in tuning and production noted above, the band rewrites the blast section to reduce the gulf between gestures. As Example 17 shows, the re-recoding's guitar riffs and drum figures project a less busy, more regular texture than the original. Harmonically, the original 1989 version of riff d begins with a hitherto unused pitch—E-flat, the diminished fifth above the tonic A. That former tonic now serves only as a neighbor to an equally unprecedented A-flat power chord. In riff e, the blasting and loose strings render the strumming on the open low A string all but inaudible—with the squealing minor ninth B-flat3 and octave-plus-diminished-fifth E-flat4 jumping out of the blur.

Example 17. Comparative transcription of the original blast section in the 1989 "World Eater" recording and its blast-less rewrite in the 1994 re-recording. Drum fills and turnaround on riff e omitted.

While notably more elaborate than Napalm Death's "Instinct of Survival," the blast section of the 1989 "World Eater" recording performs the same gesture: it rips listeners out of the groove. And not just listeners, as contemporary live performances by Bolt Thrower show. At the Nottingham stop of the 1989 Grindcrusher tour, the audience headbangs and sways to the groove—in sync not just with the

music, but also with band members.[60] Bass player Jo Bench headbangs to the quarter note beat of the groove. But this model motion stops once the rapid strumming of the blast section strains the ensemble's ability to keep up with each other. At the same time, the back-beat-coordinated waves of the audience give way to the entropic collisions of moshing turmoil.

In the 1994 re-recording of "World Eater," however, Bolt Thrower transforms a blast section that qualitatively broke with the groove into a slightly heavier continuation of that groove. In terms of pitch material, the re-recoding retains the pairing of tonic and flat fifth scale degree. But riff d now begins on the tonic with a crunchy single-note tremolo, contrasted by riff e sustaining the diminished fifth with light embellishments. Most consequential, however, is swapping the blast beat for a double bass roll with a snare hit on each quarter note. While this pattern still doubles the frequency of snare hits from the preceding backbeat, this subdivision is a gradual intensification of the groove that reinforces an existing accent pattern.

Spectrograms of the passage show the cumulative effect of the re-writing and digital re-mediation of the sound. Pictured at the bottom of Example 18, the re-recording's quarter note beat remains visible—and, of course, audible—across the gulf of the beat-less break that introduces riff d. Likewise, the onsets and decay of the drum and guitar punctuations on every measure's first beat feature sharp transients (showing up as a black line, with high-frequency noise extending far up) and rapid, clipped decays.

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[60] "Bolt Thrower - World Eater [Grindcrusher Tour, 1989 Live at Rock City Nottingham] - YouTube."

riff d (break)   riff d (with beat)
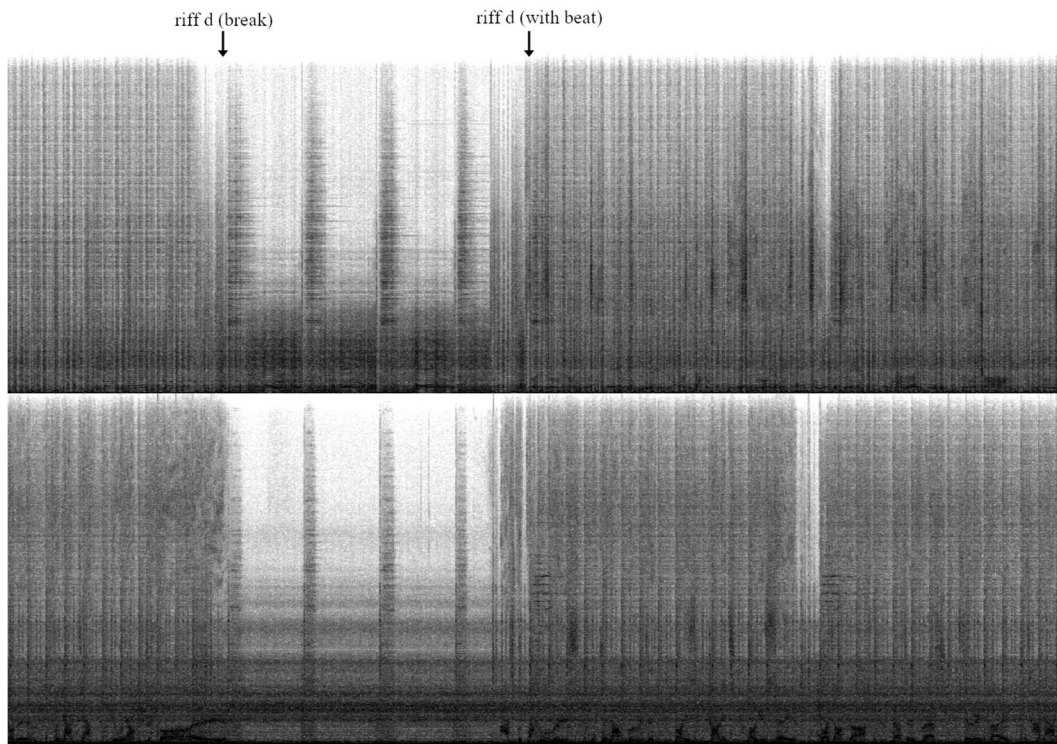
Example 18. Spectrogram comparison of the "World Eater" blast section and its rewrite scaled to accommodate the slower tempo of the latter. Note the clear quarter-note beats throughout in the re-recording.

With the contrasts in surface motion and clarity leveled in, the listener now is never deprived of an explicit quarter-note pulse she could entrain or re-entrain to. At least on record, the swells and dips in rhythmic activity now take place on an even grid and with a consistent timbral palette—which hold and don't fall apart in the blast section. While such control is only partially achievable in live performance, Bolt Thrower also avoids the original recording's non-stop blasting when they perform "World Eater" live. At other times, the song is reduced to its groove section and used as an introduction to the blast-less "Cenotaph," sometimes, the blasting is broken up with a skank beat during leads.[61] In either case, the beat established by the heavy grooves is not blasted away for extended periods of time.

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[61] *Bolt Thrower - Helsinki 28/06/2013. BOLT THROWER World Eater + Cenotaph, Live in Stuttgart*. Set length and drummer fatigue play a role here, of course.

Other grindcore bands also pursued this strategy of diluting blast beat sections with riffs that more clearly express meter. Recently reconstituted with two US-reared guitarists, Napalm Death re-recorded the *Scum*-era song "Siege of Power" at Morrisound Studios during the sessions for their death-metal-leaning 1990 LP *Harmony Corruption*. Once more, the groove—in spite of tighter timing—is not recomposed. Originally, that groove trails off into whammy bar wails and decelerating drum hits, a sonic mess from which a stomping break emerges. This break serves as the launch pad for whirring Discharge-with-blasting riffs, always somewhat out of tune and interrupted by even more chaotic breaks that switch the position of snare and kick in the blast beat for just a measure. In the "Americanized" re-recording, the guitarists stay off the whammy bar during the break—and launch into a tremolo riff with perfectly even quarter-note melodic motion over a skank beat, now contrasted with a full-fledged riff of bouncy power chords. Carcass demonstrates an alternative, but related strategy when they insert skank beats into their re-recording of the *Reek of Putrefaction* song "Pyosisified: Rotten to the Gore"—thus allowing listeners to regain their footing much sooner, and more regularly than before, just as Bolt Thrower did in their later live performances of "World Eater."

Grindcore's choice and compulsion

Of course, the bands *wanted* this change—my point is not to deny their agency. At the same time, once polished death metal became the circulating yardstick for extremity in sound, it was harder to *want* to sound raw and analog. Bands re-experienced grindcore through the lens of its digital re-mediation, both in the studio and through records. In the studio, dynamics processing and samples use amplified inconsistencies, especially under repeat listening with specialist producers—especially those used to the playing standards of US death metal. This disincentivized grindcore's happy-go-lucky approach to the blast beat, with changes radiating outward from that gesture's domestication.

Something had to give: drummers had to adapt and songs had to be adapted, but the exact proportion of these changes varied from band to band—as did the turmoil this transition caused.

As I showed in previous chapters, death metal's use of the blast beat demanded discipline and precision, to the point where the technique's fulfillment could only be achieved in the studio. Against this foil, grindcore's initial comfort with more relaxed performance—and more indulgent movement—became marked. And unlike in death metal conceived as "just" metal, this laxness could be explained and valued as a lasting punk allegiance. But to the ears of US death metal bands, this was just poor work ethic. At times, this sense of difference takes the form of briefly pointing out that Carcass "weren't the tightest of bands."[62] Sometimes, bands would even get rechristened on these grounds. California's Exhumed distinguished themselves from their peers by being "faster, heavier and sloppier than almost everyone else." While they initially took themselves for a death metal band, local grindcore band Plutocracy read them as a fellow grindcore band—likely because they combined Carcass' tongue-in-cheek gore imagery with a tolerance for corporeal abandon that was just a bit too reckless for death metal.[63]

These re-negotiations in the face of a new production aesthetic were contentious. Achieving the sonic weight and rhythmic solidity of death metal came with significant growing pains for Napalm Death—an infamous episode widely recounted by fans and musicians after being initially publicized in Mudrian's *Choosing Death* in 2004.[64] Impressed by the drum production of Death's *Leprosy,* Napalm

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[62] Netherton, *Extremity Retained: Notes from the Death Metal Underground*, Locations 1652 & 3766.

[63] Accounts of the event are highly consistent between actors—to the point where they may appear to reference Burns' remarks in *Choosing Death.* Tony Laureano, for example, also uses the "microphone" metaphor quoted below in his interview with Netherton. Yet he cites Napalm Death guitarist Shane Embury as his source. The narrative importance of this anecdote speaks to the tight-knit Florida death metal community and its ability to stand in for a shared transition experience.

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Death moved to Florida to record their third LP, *Harmony Corruption*, at Morrisound Studios—and with two new American guitarists. Sharpened with Morrisound's sculpted samples, the wildness of Mick Harris' drumming sounded like sloppiness to producer Scott Burns and the guitarists: "Mick's more of the traditional European grind player, and he definitely has a style, but I guess when you put it under a microscope and really try and get a good recording of it, you see some things that aren't so good." Harris, frustrated by his bandmates partying with their Floridian friends, didn't handle being asked to re-do takes well: "I remember one day I just lost it under stress and I snapped at Scott and I called him a fucking cunt."[65] With some mediation from the label and studio boss, the belligerents buried the hatchet and production on *Harmony Corruption* could resume.

Napalm Death's fateful stint at the then-center of death metal production was also captured on videotape. Shared on YouTube decades later, this snapshot documents the moment when the lines between grindcore and death metal could be drawn more clearly—thanks to a new, digital sonic palette.[66] Apparently recorded after the quarrels of the tracking stage, the footage shows the process of mixing the "Siege of Power" re-recording mentioned above. The entire band listens to the in-progress mix with Scott Burns. After the guitar balances are adjudicated, the snare gets scrutinized. Heard by itself, the samples of the snare fill before the rewritten blast section sound incorporeal; once the snare joins the ensemble with skank beats, its forceful crack threatens to overpower the punch of the guitars—as it would inevitably with Harris's blasting in the past. Selectively added reverb and tweaks

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this anecdote speaks to the tight-knit Florida death metal community and its ability to stand in for a shared transition experience.

[65] Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 184–85. Napalm Death's example is extreme. Other bands disciplined their playing and embraced the new tools at their disposal with less friction. Jeff Walker of Carcass recalls that after Reek of Putrefaction, the guidance of producer Colin Richardson "enabled us to iron out all the problems with our playing." By their third album, 1991's Descanting the Insalubrious, Carcass—and Richardson—were using samples; the album is widely considered the band's most death metal recording, a point of equilibrium between their grindcore beginnings and eventually move towards melodic, verse-chorus-based utterances.

[66] *Napalm Death @ Morrisound*. The mixing of "Siege of Power" begins at 8:28.

to the EQ, however, rein in the snare and blend it into the ensemble.

The bass drums are to be mixed next—but not until the band veers off into asides on embodiment and how two-pedal kick drums ought to be used, pithily reflecting on the prosthetic uncoupling of drum performance and sound. Air drumming to his parts, Harris had stayed mostly silent up to this point—which the comment section interprets as exhaustion—but chimes in once he is admonished not to get his arm cut off while driving his car.[67] The car used by the band—or rather, its bottom-of-the-barrel stereo—had already been a topic of conversation. Now the car stereo sets up a reference to the accident of Def Leppard drummer Rick Allen. After a car crash, Allen lost his left arm to an infection. Yet a custom-made d-drum set allowed him to perform the band's repertoire again, since it was equipped with foot pedals to replace drums hitherto played with his left arm. Responding to the quip that "he'd come back with an electronic drum set," Harris goes along with the banter as he pantomimes the kit off-camera:

> It's a motherfucking… that is my snare… so that foot on it. No double bass, just knocking at my bass. [Harris audibly demonstrates how he would play a blast beat, rapidly tapping his feet while mimicking a slower cymbal with his mouth—and gesturing with his non-amputated arm] [laughs] It still works, snare bass, snare bass!

When one of the Floridian guitarists points out that Harris cannot play continuous double bass under a blast beat that way, Harris objects ("bollocks") and say he wouldn't want to, drawing a geographic and subgeneric line:

> I agree the same as Barney [the British vocalist of Napalm Death] double bass is used for power, always was [uses his voice to imitate an eighth note pattern kick pattern with heavy accents] [unintelligible] I mean on Morbid Angel the double bass is just used for the sake of it… […] it's just overused.

Among Floridians on their home turf, it is hard not to interpret Harris' quip as asserting grindcore's

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[67] *Napalm Death @ Morrisound*, 22:15-23:45.

earthy ethos in the face of death metal's display of virtuosity and the sounds engineered for this display. As another listening muffles the conversation, Harris checks out once more to show the camera his tattoo sleeves.[68] Eventually, the camera—and with it, our eyes and ears in the past—follows the rest of the band outside, where they listen to a hastily-produced cassette of the work-in-progress mix on the car stereo—the bottom end of the drums impresses even on a sub-par stereo.

After all the attention his drumming drew in the studio, Harris himself appears quite lost amid the light-hearted mingling and banter: an emblem of his personal trajectory as well as of the short-lived aural tradition he helped found, where the inability to capture and tame the blast beat served as the nexus of a titillatingly frustrating formal experience. In the arm-less blast beat jest captured on video, Harris speaks a truth that neither he nor his peers would have acknowledged openly. The blast beat as it had defined grindcore, a messy inconvenience to performers and audiences alike, was being erased by bands chasing death metal's digital clarity. On his last tour with the band in 1991, the physical effort of drumming seemed no longer worth it to Harris: "I sort of just went into machine mode and played and just really cut down on the fills. It was, get it done, get off."

How grindcore lost its blast beat

In its own way, grindcore lost the blast beat to the digital upheavals in its production. Yet compared to death metal, grindcore's loss was unique, if complementary. Death metal lost the blast beat as a measure of value, the value of the labor a (masculine) body could command without relying on outside capital, but gained it as the fulfillment of its ideal of immaculately controlled virtuosity. Grindcore, on the other hand, had needed the blast beat as a disruptive force—casting its richly developed grooves as a source of pleasure, fraught with capitalist and carnal fragilities. My formal-embodied and historical-

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[68] Noting that he needs to get a small confederate pin on a skeleton cowboy covered.

recorded arguments hinge on the loss of the blast beat and the analog media ecosystem.

The twin gestures that the label "grindcore" captures emerged from this constellation. To read this meaning, one must do more than reconstruct historical punk and metal crossovers—though these meta-generic poles help theorize grindcore's hybridity. I argued that the audible meat and bones of grindcore's original formal process—gestures that move you, and that only sometimes let you move to them—exceed the intentions of performers. After all, chaos is not created; chaos happens. But this material excess only became apparent—and valued—in retrospect, like Benjamin's aura, in its passing away. Fiercely disappointed with the sound of *Reek of Putrefaction* when it was recorded, Jeff Walker eventually singles out its rawness as part of the debut's distinguishing appeal:

> We did the album in a day, and the guy who was engineering it really messed it up" […] "But I like the way it sounds now, in retrospect. At the time, we were like pretty upset to where we walked out. It just sounded shitty to us. But that's part of the attraction—because it just sounds so raw.[69]

As on all the early grindcore records, the most undercooked—or, depending on your perspective, freshest—bits were the blast beat sections. The grooves were already well-done, even in 1987.

The unequal shelf life of the groove and blast gestures sets into relief grindcore's original formal process, a process that got listeners hooked on a groove, only to pull the rug with chaotic blast beats. In re-recording their earlier songs, former grindcore bands rarely saw fit to add new melodic or rhythmic content to these parts after their conversions to the death metal creed. They still changed: from the laxness of detuned strings to limited takes, the tools and processes co-performed laid-back timings and incidental texturing lost in the remakes of those same songs. But that extra bit of enjoyment added to getting lost in the groove pales compared to the *jouissance* of being ripped out of

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[69]Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 143.

grooving along to a record alone, or with others at a concert. To achieve this, grindcore needed a blast beat that could suspend a meter one could move to, blot out the accompanying warp-speed punk riffs, and blur points of temporal convergence with those guitar parts. But once faced with immaculate-sounding death metal records, keen-eared producers, and bigger budgets, that mayhem—the seed of grindcore's formal scripts—now sounded like amateurism to its practitioners.

Once grindcore bands tried to appropriate death metal's controlled convulsions, the reckless abandon they left behind on their earlier output became its retroactive signature. Blast beat sections became fewer, and more controlled, and were blunted by newly added guitar materials. The groove's rug was no longer pulled entirely—just yanked around a bit, but not enough to make you lose footing altogether. The audible gap between grindcore's beginnings and the direction its founders took also inscribed a lasting alternative that future bands could cite as "grindcore": a lack of control—and comfort with letting bodies groove, even if that meant grooving off a cliff.

As death metal—and the lasting changes in production it augured—usurped what had been the sounding crux of grindcore's formal gesture, this opened up new aesthetic avenues. Harris departed Napalm Death not long after recording *Harmony Corruption*, turning his attention to loop-based electronic music—and, eventually, collaborations with John Zorn.[70] Black metal would leave behind death metal drumming in its own way—and take the devaluation of physical prowess as an excuse to introduce sequenced electronics and drum machines.

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[70] Bassist Shane Embury recalls that in the face of the blast beat occupying a more marginal place in Napalm Death's output, Harris tried to re-assert its disruptive potential—to the disapproval of the band: "He'd tell us that when we wanted to do the next album he wanted to do blasts where there shouldn't be blasts, really weird, strange things." Mudrian, *Choosing Death: The Improbable History of Death Metal & Grindcore*, 2016, 202.

CHAPTER 5. ANALOG SUBLIMATIONS

Will we be able in the future (and there will be no future except on this condition) to think both the event and the machine as two compatible or even indissociable concepts, although today they appear to us to be antinomic? Antinomic because we think that what happens ought to keep, so we think, some nonprogrammable and therefore incalculable singularity. We think that an event worthy of the name ought not, so we think, to give in or be reduced to repetition. An event ought above all to happen to someone, to some living being who is thus affected by it, consciously or unconsciously. It is difficult, however, to conceive of a living being to whom or through whom something happens without an affection getting inscribed in a sensible, aesthetic manner right on some body or some organic matter.
— *Jacques Derrida, "Typewriter Ribbon: Limited Ink (2) ("within such limits")"*[1]

Re-evaluating reaction

Historically, black metal was the denouement of extreme metal's encounter with digital mediation. It established the firmest distinctions between the subgenres and set the earliest precedent for the technostalgic attachment to extreme metal's analog origins. As such, black metal's codification around 1992-1993 was a conclusion, a return, a coming-full-circle. But that ostentatious return to extreme metal's analog origins allowed black metal to embrace digital aesthetics and tools like no metal subgenre before it. This productive nostalgia, a polemic made audible, concludes the subgeneric codifications at the cusp of the digital era.

What is now considered black metal was codified in the early 1990s as a self-conscious repudiation of death metal—another fundamentalist reformation, a backstitch on metal's time axis. These efforts were spearheaded by a tight-knit circle of Norwegian bands clustered around and enmeshed with the band Mayhem, a network that disintegrated amid highly publicized murders and church arson. Based in part on the self-mythologization of the Norwegian scene, it has become common to speak of three waves of black metal: a first wave in the earlier 1980s, which the second

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[1] Derrida, "Typewriter Ribbon: Limited Ink (2) ('within Such Limits')," 277.

Norwegian wave elected as models to be emulated against the decadence of death metal, and a third wave that formed on the heels of the Norwegian carnage. I previewed black metal's polemic against death metal in Chapter 4's introduction. As part and parcel of that revolt against the modern metal world, black metal hailed the analog origins of extreme metal, willfully misrecognizing Venom and Hellhammer as true-believing Satanists. It championed that fundamentalist creed against death metal, which had, ostensibly, assimilated and ceased being evil—the moral equivalent of its reliance on the repeatable sonic signatures and control offered by Morrisound or Sunlight Studios. According to black metal founding statements, the only way forward was to turn back to the analog past.

By and large, scholarship does not contest black metal's backward-facing attitude towards media, at least at the level of its sound. For a long time, the sheer outrageousness of black metal's visuals and ideological proclamations stole the show. Black metal's visual aesthetic, with its highly distinctive black-and-white face paint, faux-medieval leather armor, and fanciful posing in forests, has inspired visual artists beyond the metal scene; likewise, the Norwegian scene's self-promotion-by-infamy continues to draw a new generation of listeners—and inspired a feature film dramatization.[2] Thus, black metal's innovations in public relations are more readily acknowledged. Where its sound is considered, black metal's iconic feature is the raw, thin, and icy production that characterizes Norwegian black metal's major releases. So far, scholars have interpreted black metal's turn to raw production and simplicity as recovering humanity that was lost in death metal's pursuit of virtuoso drumming *and* impeccable clarity. Ian Reyes represents the consensus when he writes that: "[b]lack

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[2] A good introduction to the far-ranging, cross-media influence of black metal can be found in Howells, *Black Metal: Beyond the Darkness*. The 2018 feature film *Lords of Chaos* takes its name from a book on the Norwegian scene and its crimes, first published in 1998 and received with some controversy by both reviewers and some of the actors it covers. Nonetheless, it greatly shaped the discourse on black metal beyond the scene. Moynihan and Søderlind, *Lords of Chaos: The Bloody Rise of the Satanic Metal Underground. Revised and Expanded Edition*.

metal coalesced around an emerging nostalgia for the authenticity imagined to infuse classic recordings from previous generations."[3] Black metal is portrayed as recovering a de-skilled DIY aesthetic, on grounds that would be wholly acceptable to punk scenes (and thus unlikely to sway black metal's true believers: remember the repudiation of hardcore and grindcore in Chapter 4).

However, viewing black metal as a return to an earlier analog DIY practice fails to account for what sets the second wave of black metal apart from its claimed antecedents. Musically, it embraced not only repetition but also the use of drum machines, keyboards, and sequencing. Even where the instrumentation sticks with metal orthodoxy, formal processes suggest characteristics of electronic dance music, such as the fading in and out of discrete tracks—in particular in the proliferating one-man bands. These developments had no precedent in earlier metal subgenres, extreme or otherwise, but took advantage of the concurrent boom in more affordable, more portable recording equipment chronicled in near-real-time by Paul Theberge.[4] Furthermore, interpreting black metal's most strikingly original musical facts—a veneer of analog low-fidelity over musical processes gleaned from coolly spinning gears of mechanized music—as an expression of genuine Romanticism and a recovery of human individuality is hard to square with one of the few consistencies in black metal's polemical self-positioning. It denounced humanism and individual freedom, which—in true fundamentalist fashion—were shunned as a gateway to decadent degeneration.

But the struggles around drum replacement and technological mediation *do* explain why black could leave behind not just virtuosity, but any semblance of embodied performance—and radically break with these long-standing shibboleths of metal music. Recall the conclusions grindcore drummer Mick Harris drew from his experience with the death metal paradigm: he quit drumming to take

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[3] Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics," 252.
[4] Théberge, *Any Sound You Can Imagine: Making Music/Consuming Technology*.

advantage of loops and sampling. In Norway and beyond, musicians arrived at the same conclusions but managed to channel them in a new extreme metal subgenre, justifying their innovations under the guise of a return to analog origins and a disavowal of what they saw as vain, individualist hubris. After all, the athletic aspects of death metal drumming—which made performance enhancement necessary—were forged in competition between individuals. To speak with Lacan once more, black metal's solution was perverse. To limit its enjoyment of digital tools, it decided to submit itself fully to the analog patriarchs. Once it had propped up that law, that ersatz-big-Other, it got to enjoy those tools anyways. I elaborate on this law as concrete and particular by drawing on Gillian Rose's interpretation of Heidegger. In terms of its discursive-symbolic justification and its material-imaginary tools, black metal is thus a truly post-digital style: an embrace of the digital in the guise of a return to an analog past.

At the heart of this concluding chapter, I present three exhibits from black metal's archive and show how they sublate a previously conflicted relationship to digital tools. Each of these records anchors a mini-constellation that revisits topics covered earlier in the dissertation: material particularity versus symbolic universality, the value of embodied effort in drumming, the intentional and the accidental on record, and if extreme music is supposed to move you—or let you move to it. To let the oddness of my examples emerge more clearly, I preface them with somewhat less history than I have done in other chapters: just enough to reconstruct the reductive view of black metal as all-backward-looking and establish how keenly ideology and production intersected in the founding polemics of the subgenre that named and solidified the politicized the fissures in extreme metal's mediation.

My first exhibit is Darkthrone's *Transilvanian Hunger*, perhaps the most-emulated black metal album ever. Its creator hears it as containing too much black and not enough metal, suggesting that

this blackness could be extracted from other records as something distinct from metal. I take this account of black metal's non-metal origins seriously and suggest a major source for the "black" in black metal came from electronic music records. My second exhibit is Ildjarn's *Strength and Anger*, a record of nameless, ruined-sounding feral minimalism that is hard to digest even for hardened fans of the subgenre. With Ildjarn, I also confront black metal's reactionary politics head-on, as the artist spells out his far-right, anti-humanist beliefs in the manifesto "Ildjarn is Dead." What killed the project? The death of its four-track recorder, which the artist needed to deny his own subjecthood—and prop up an archaic, anti-universalist law that resonates with Heidegger's darkest thoughts. My final exhibit is Summoning's *Minas Morgul*, an album that marked the band's turn to a style wholly sequenced on keyboards—where guitars become an afterthought. What guarantees the project's continued claim to being black metal, however, is the fact that this style is framed as a necessary result of kicking out their death metal drummer: the ultimate license for black metal's embrace of the digital.

The politics of reclaiming analog pasts

Raising the issue of subgeneric pedigree explicitly made black metal the indispensable conclusion to extreme metal's digitally prompted differentiation. But black metal's historical reflexivity also has the potential to shroud the merely tactical function of its ideological proclamations. To prepare my three exhibits, I suggest that scholars have overstated the degree to which black metal was a return to extreme metal's analog past, motivated by Romantic nostalgia. I suggest that black metal's original polemic is better understood as anti-Modernist in a way that is deeply, deeply Modernist—and a perverse repudiation of the end of ideology, hastily proclaimed after the end of the Soviet Union. Since much ink has been spilled on black metal's history and ideological commitments, I will only review those rhetorical strategies that illuminate its desire and allowed it to naturalize tools and processes hitherto

unacceptable to prior (extreme) metal subgenres.

A Modernist or a Romantic return?

By explicitly policing subgeneric borders, black metal forced others to reckon with the aural realignments analyzed in earlier chapters. Death metal virtuosity's co-evolution with drum replacement, grindcore's pivot away from its grimy origins, and the uncomfortable dependencies and inequities these changes entailed were politicized by black metal, albeit in a fashion that disavowed politics by presenting the split as a matter of faith. Weinstein's designation of extreme metal as a "Protestant reformation" was an after-the-fact scholarly interpretation; black metal proclaimed a return to a past betrayed by death metal as a program before it fully realized its aural counterprogram.

In place of Ezra Pound's "make it new," black metal's first stirrings were impassioned calls to "make it old." In 1991, before the Norwegian crews had released any albums that realized their vision of a renewal of orthodoxy, Øystein "Euronymous" Aarseth (their de-facto leader, guitarist of Mayhem, owner of the record store Helvete in Oslo, the small label Deathlike Silence Productions, and soon to be murdered by bandmate Kristian "Varg" Vikernes, the sole member of Burzum) delivers the catechism of black metal. His articles of faith, repeated by his associates in interviews elsewhere, are worth quoting at length, since they code the standardization of death metal production as a slippery slope towards bland consumerism:

> [...] creativity disappeared in the middle of the '80s. I think 95% of the bands today are worthless shit, there are just a very few who manage to capture the brutality and EVIL which the ancient bands like SODOM, DESTRUCTION, BATHORY, POSSESSED, VENOM, HELLHAMMER/CELTIC FROST and so on had. It's very important that the music is filled with dark moods and that the music SMELLS of destruction, but no bands manage to do that. [...] But instead they suddenly occur in the scene and rip off another band like ND [Napalm Death], which has made something original. [...] The last NAPALM DEATH lp is also a part of this extremely boring mainstream which people dare to call Death Metal, I just can't stand

this music at all. Standard music for standard people. […] I don't want to see MAYHEM records in supermarkets in USA like you can do with ND and MORBID ANGEL.[5]

Euronymous offers a summary judgment on the changes covered between Chapters 1 and 4: they shouldn't have happened. The olfactory metaphor aims at studio production and the overall timbral profile. Just like a smell adheres to its source continuously, production adheres to every moment of an album. Morrisound clearly is the main culprit for Euronymous, since he contrasts Napalm Death's earlier "original" efforts with the Morrisound-produced *Harmony Corruption.* The USA, the locus of that not-so-great equalizer of metal sounds, becomes a symbol of digital colonization. I will earmark this anti-American and anti-consumerist stance for later. Aurally, Euronymous statements suggest pure conservatism.

Given these denunciations of recent developments in extreme metal, it is not surprising that scholars emphasize black metal's analog revivalism—even if this does little to explain what I will argue are its post-digital innovations. Ian Reyes has termed black metal's self-conscious differentiation from death metal the "black turn," a global phenomenon (even though Reyes' witnesses are exclusively Norwegian. Reyes compels us to tell a musical history of black metal, as opposed to focusing on the crimes and transgressive statements of various members of the Norwegian scene.[6] But Reyes' account emphasizes black metal as a repetition, suggesting that what characterized the "turn away from death metal were the preferences for amateurism over virtuosity and for low-fidelity production over high."[7] As Ross Hagen's catalog of black metal's musical traits shows, the second, self-conscious batch of black metal innovated significantly: it introduced keyboards and synthesizers, regularly employs muddy-sounding distorted imperfect consonances and minor triads, and tends to dissociate its fast drumming

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[5] Kristiansen, *METALION: The Slayer Mag Diaries*, 210.
[6] Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics," 240.
[7] Reyes, 247.

from disembodied, flowing riffs that eschew the choppy contours of death metal. Yet death metal was the point of departure for most bands that turned.

In his monograph on Darkthrone's *A Blaze in the Northern Sky*, the first album to embody this re-orientation, Hagen offers a more historically contextualized interpretation of black metal's revivalist tendencies. Recorded late in 1991 and released in 1992, the album was initially conceived as a follow-up to Darkthrone's Sunlight-produced *Soulside Journey*. A demo later released as *Goatlord* showcases the intricate, virtuoso direction the band would reject just prior to recording *Blaze*. Gylve "Fenriz" Nagell, Darkthrone's drummer and (eventually) guitarist), recalls the disenchantment with death metal:

> […] the songs we made were still death metal—we had 13/16 beats and shit like that, it was almost jazz—and I was thinking in my head, 'this professionalism has to go. I want to de-learn playing drums, I want to play primitive and simple, I don't want to play like a drum solo all the time and make these complicated riffs.[8]

Part and parcel of this sentiment is the band's stated dislike of the electronic, sample-triggering drums that Sunlight used to retain clarity in these busy performances, quoted at the end of Chapter 4. Given these comments, it is not surprising that Hagen frames Darkthrone's main contribution as a recovery of a "DIY aesthetic" (visually as well as aurally), which recovers liveness and human imperfections in playing—a punk take on Romanticism. But Hagen acknowledges that an analog revival in the service of humanity chafes with the ideology black metal proclaimed at the time: "In the end, there is perhaps a small irony that this music which has such a reputation for misanthropy began as a reaction against the dehumanization of metal music production."[9] What I will argue, of course, is that black metal attempted to complete this dehumanization—by embracing electronic/digital forms more fully than

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[8] Patterson, *Black Metal: Evolution of the Cult*, 197.
[9] Hagen, *Darkthrone's A Blaze in the Northern Sky*.

ever before, while deriding their partial, prosthetic use in death metal.

Black metal's perverse revival of the analog law

At the surface, the small but formative Norwegian black metal scene was ideologically diverse: far-left and far-right, Satanic and pagan, tentatively united in opposition against its others. Musically, that other was death metal and its hegemonic production ideal, philosophically, that other was Christianity—although Christianity was, in many ways, code for a thorough rejection of the Enlightenment and the lowercase-l liberal consensus. Death metal—even if this may seem counterintuitive—became a symbol of the just-proclaimed, not quite-final "end of history." Just beneath the surface, the self-conscious second wave of black metal espoused a rejection of individual freedom, extolling complete subjection to forces greater than the individual.[10] Lacanian psychoanalysis would consider this a perverse subject position, trying to turn oneself into an instrument of the Other's desire—to escape getting lost in the demand of the womb one came from.

So far, black metal's adoption of aesthetic strategies that originated in Romanticism has deeply colored the interpretation of its proclaimed fealty to the analog past. Norwegian black metal began to incorporate its native language, landscapes, and pagan past into its branding, garnering success by self-exoticizing in a globalized world. Once more, by specifying celestial orientation, Darkthrone's *A Blaze in the Northern Sky* was the first widely circulating carrier of what it termed "True Norwegian Black Metal." Ross Hagen terms this strategy "borealism," a Scandinavian analog to "Orientalism," and convincingly links black metal's success to the concomitant rise of world music.[11] And like Norwegian

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[10] There's a case to be made that this authoritarian impulse is the logical conclusion of Romantic individualism, conceived as immediately apprehending truth. Gillan Rose forcefully argued that because Fichte develops the world out of the ego, he needs to reign in the volatile omnipotence of that ego by subjecting it to the strictest legalism. Without law conceived as nothing but limit, there would be no object. Rose, *Hegel Contra Sociology*, 215.

[11] Hagen, *Darkthrone's A Blaze in the Northern Sky*, Location 722.

bands turned to Odin, black metal bands in other parts of the world turned to their local pantheons: Mexican black metal band Xibalba turned to the Aztec gods, and Palestinian black metal band Melechesh to the Assyrian gods, to name two representative non-Western examples.[12] The dark side of this national particularism presented an opening for far-right ethnonationalism. The Norwegian scene likewise prefigured this enduring liability for black metal.[13] But Romanticism is just one tactic, one mantle black metal's attempt to curtail its own desire takes.

Black metal's ideological maneuvering in the analog-digital juncture becomes intelligible as something more than just Romanticism when considered as a perverse act. The function of the proclaimed return to the analog past, no matter in whose name, was to bring the law into existence that could limit a threatening demand. As psychoanalyst Bruce Fink writes, the pervert is insufficiently separated from his (m)Other—and thus fears getting lost in demand, the pre-cultural, unsymbolized maw that lurks beneath desire when the paternal law is stripped away.[14] We don't have to look far to see what black metal feared getting swallowed by: death metal's entanglement with digital technologies, repeatable production paradigms that could envelop bands and overhaul their sounds, and worse still, confer some worldly success. But as a source of pleasure-limiting law, the actually existing Venom— the hedonistic, fun-loving band covered in Chapter 1—wouldn't do. In an infamously sensationalist 1993 *Kerrang!* feature, Euronymous claims that Venom were the unwitting tool of an evil power he worships consciously: "I don't know what went on in their heads at the time, but I do know of six

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[12] As Kenneth Granholm notes, the turn to European paganism was a revival of a revival. Romanticism's turn to the concrete against Enlightenment universalism stimulated the rediscovery and often outright invention of nationally specific pagan faiths. Granholm, "'Sons of Northern Darkness': Heathen Influences in Black Metal and Neofolk Music."

[13] For an analysis of the far-right orientation of far-right ideology in black metal, see a.o. Spracklen, "True Aryan Black Metal: The Meaning of Leisure, Belonging and the Construction of Whiteness in Black Metal Music." Hedge-Olson, "Voice of Our Blood: National Socialist Discourses in Black Metal."

[14] Fink, *A Clinical Introduction to Lacanian Psychoanalysis*, 178.

people who have died as a more-or-less direct result of Venom's existence."[15] Euronymous and his soon-to-be-murderer Varg go on to state that they know very well that Venom weren't practicing Satanists—but that the Norwegians choose to believe otherwise, the classic figure of disavowal. Thus, to separate itself from origins that had grown into a cyborg force threatening to swallow, black metal had to augment the past to invest it with a paternal power that could make its temptations manageable.

Yet historical revision alone cannot restore Venom's phallus and imbue the past with a power to resist the siren song of the digital. For the pervert, the law is not a matter of *sola fide*: submission to the law takes deeds, musical and otherwise. Black metal's founders had to become what Venom eminently lacked. Boasting of arson he would soon be convicted of, Vikernes is quoted in the same *Kerrang!* feature as follows: "We support Christianity because it oppresses people, and we burn churches to make it stronger." Here, we see that for the pervert, *any* law, sufficiently powerful, will do. Conversely, the self-legislating hedonism promoted by the individualist atheist Satanism of Anton LaVey was anathema to the Norwegian scene.[16] Black Metal's ideological commitment was theistic. The One it believed in could be signified by anything that promised sufficient relief from freedom: an all-powerful Satan, an oppressive church, or a totalitarian regime. This explains the common ground between Euronymous, active in a Hoxhaist communist party, and Varg, who championed Hitler.[17] These signifiers of unfreedom, which degrade law into a naked limit on the pursuit of happiness, orbit around a paternal function too meek to contain what the pervert wants to get off on.

The pervert's need for a strong law illuminates what "Christianity" signified for black metal's

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[15] Arnopp, "Arson... Death… Satanic Ritual... The Ugly Truth About Black Metal."

[16] Recall Chapter 4's introduction: before Scott Burns, the crossed-out face of LaVey adorned albums published by Euronymous.

[17] Enver Hoxha was the dictator of Communist Albania. During the Sino-Soviet split, Hoxha sided with Mao, who accused the Soviet leadership of revisionism for denouncing Stalin. After Mao died and Deng Xiaoping defeated the "Gang of Four," Hoxha broke with China. In the 1991 interview with *Slayer Mag*, Euronymous also mourns the demise of Ceauşescu and expresses hopes to play in the then-remaining Communist countries.

second coming—and why Christianity could be mapped onto death metal, which, at least to black metal, sounded like the world-historical growls of triumphant liberal capitalism. In an insightful *Spin* report from 1996, Darcey Steinke writes: "Everyone in the Black Metal scene tells the same story: that they were baptized but never attended church, that their parents didn't believe in God. Required religion classes in school were 'boring' and 'bogus.' Teachers made you memorize prayers no one believed."[18] And while only three percent of Norwegians attend church or consider themselves active participants, Lutheranism remains tightly integrated into the famously well-administered Norwegian welfare state and fossil fuel economy. Francis Fukuyama had just proclaimed the "end of history," an eternity of halcyon liberalism to come. Yet even then, the Norwegian Black Metal scene felt the wear in the fabric of this Symbolic Order, expressed in its anxious nostalgia for a severe, impersonal law.

Thus, in its opposition to death metal hegemony, black metal also holds on to fragments of modernism, even the greatest project of modernity, socialism. Crucially, the socialism that fed into black metal's wellspring had already degenerated into nationalism, its former universalist internationalism being a distant memory:

> Even though I'm active in the most extreme communist party here (Albania inspirations), I leave to the Punks to write about that in the lyrics. […] even if I'm personally very much into studying the great works of Mao, Stalin and so on, I think the band is much more important, and Death and Black Metal is my life."[19]

Euronymous disavowed politics, or more accurately, subordinated them to the religious practice of black metal. But with his label, Deathlike Silence Productions, Euronymous engaged in anti-imperialist action against American death metal and its digital armaments. Fenriz recalls that Euronymous made a point of how global his label's contacts were "by having a huge map in his office,

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[18] Steinke, "Satan's Cheerleaders."
[19] Kristiansen, *METALION: The Slayer Mag Diaries*, 201.

having pins and a map from where he had contacts. He always wanted to have contacts in Africa and like that, he craved that. The quality of the music for instance was not important for him as long as it were [sic] from a troubled situation, it was it was supposed to be like a struggle, metal should be hated."[20] Helvete's office, of course, also included communist icons.

Sectarian Marxism has rarely been seen as a model for black metal's self-fashioning. But there are some hard-to-overlook parallels with Hoxhaism, the Marxist ideology of the political splinter group Euronymous participated in—aligned with a state that pursued a North Korea-like program of total isolation and ideological orthodoxy while also proclaiming solidarity with the world's subaltern. Anti-Americanism, whether from the left or the right, was common sense in the Norwegian scene.[21] As Romantic as the surface content of black metal's perverse cathexis of the analog past might be, the accusation-used-as-cover that played such a key role in Marxist socialism's disintegration is the indispensable tactical maneuver that allowed it to enjoy and incorporate the forms and tools of the digital present. Stalin, here, appears as the arch-pervert. To justify his pact with the Third Reich, Stalin had to accuse Trotsky's followers of being fascist agents. His exercise of unlimited power in the pursuit of self-preservation demanded endless invocations of "iron laws" of history as justification.

In summary, to safely consummate its attraction to the sound of the dawning digital age, black metal needed to bring the law into existence. By denouncing death metal, its sounds, and the tools used to produce them, as manifestations of global, American-led capitalism, black metal gave itself permission to draw on inspirations and use tools that prior metal would have shunned. While black metal located that paternal, law-giving function in the analog past, it also had to compensate for the

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[20] *Until the Light Takes Us*, Bonus: Black Metal 101, 44:50-45:15.
[21] Varg, for example, recalls shooting out the videos of a McDonald's as his first criminal act. *Until the Light Takes Us*.

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fact that its forefathers could not prevent decline. This compensation explains black metal's clandestine innovations. Once black metal armed itself with its analog fetish objects, it could freely incorporate new tools, techniques, and inspirations, so long as these were used to affirm the concrete and particular over the abstract and universal. In the following exhibits, I explore three symptomatic albums, which respond to death metal's digitally mediated pursuit of virtuosity with an audible critique of individual freedom, an affirmation of concrete constraints, and a more-or-less naked embrace of the digital.

Electronic undercurrents

The particularity of black metal's law was not the particularity of human individuality. Rather, black metal saw that striving for happiness as the motor driving death metal's bad universality. So, to mortify their flesh and unlearn the death metal mores, black metal musicians didn't just submit to the wiles of primitive and unpredictable equipment—they also looked to the immersive entrainment of electronic (dance) music. While numerous black metal artists hail this source of inspiration, it is rarely acknowledged in journalistic or academic accounts of the subgenre. These influences explain some of what appears most peculiar about black metal considered qua metal. By rejecting death metal's pursuit of virtuosity as vanity, and its studio-operated digital hybridization of authorship as consumerism, black metal gave itself license to incorporate new tools, forms, and sounds.

Unlearning death metal with whitewashed electronic dance music

Perhaps the most purely "black" of all black metal albums, Darkthrone's *Transilvanian Hunger* of 1994, is an easy target for ridicule, emulation, and condemnation.[22] The cover—a photo of Fenriz wielding a candelabra, the silent scream of his grimace collapsed into two-tone blobs by a Xerox machine—is as iconic as its pallid production, hypnotically flowing riffs, and unyielding drumming. Summarizing

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[22] Darkthrone, *Transilvanian Hunger*.

the album's effect, vocalist Ted "Nocturno Culto" Skjellum notes: "[...] there's not really any entertainment there. [...] It's monotone. It's very misanthropic. It's dark, and it's an album that's not easy to get into, […] it's for people that are especially interested in that kind of far-out, distant kind of riffing."[23] But interest there was: together with Burzum's discography, *Transilvanian Hunger* became the model for countless one-person bedroom black metal projects. And, taking cues from the unrepentant far-right sentiments of Burzum's Varg Vikernes, the band advertised the album as "Norsk Arisk Black Metal," a statement they doubled down on in an anti-Semitic press release at the time. Darkthrone's members have long disavowed and repeatedly expressed regret for these statements; in a scene that still grapples with racism, its contribution to this discourse remains part of the album's legacy.[24]

Transilvanian Hunger embodies orthodoxy and, on the face of it, black metal's reverence for metal's analog past and total negation of death metal's advancements. More so than any other Darkthrone album, this fourth LP was Fenriz's creation. Formerly just their drummer, he recorded all of the instrumentals on a basic four-track recorder in a living room (affectionately called "that little piece of shit studio called Necrohell studio") before sending the tape to Nocturno Culto.[25] But the album's uncompromisingly pure vision strips away so much that little metal remains, revealing the essence of "blackness" as something outside of metal's historical lineage—and something beyond de-skilling. At least this is what Fenriz's disavowal of his creation suggests: "Every time I make a new song, I'm paying the debts, man. Because I had to do *Transilvanian Hunger*, but realized I was veering into the 'too much black and not enough metal'."[26] In comments that are central to Reyes' theory of the

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[23] Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 194.
[24] Hagen, *Darkthrone's A Blaze in the Northern Sky*, Location 272.
[25] Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 182.
[26] Mudrian, 193. Paying debts meant reintroducing the metal. After *Transilvanian Hunger*, Darkthrone turned

"black turn", Fenriz suggests that the Norwegians selectively extracted the "black" from earlier records, picking and choosing based on symbolic affinities: "lyrics, the way they dressed and a commitment to making ugly, raw, grim stuff;" but also how this aural imaginary differed from death metal's: "production." Based on these comments, Reyes suggests that the "black" aural imaginary mined from Venom, Hellhammer, and Bathory re-collected sounds formerly considered the sounds of "amateurism, incompetence, and failure."[27] But Darkthrone's aggressive promotion of purity conceals deeper hybridity and innovation.

Transilvanian Hunger's saturated blackness is a far cry from the shambling decay of its ancestors. Its sonic palette is icily precise, calculated, and consistent across its tracks; its riffs and beats repeat like the turning of gears, large and small, in clockwork. This aesthetic is often called "necro," and its challenge is to convey deadness with the primitive tools commonly used to record live demo tapes. If, per Hagen's assessment, black metal was meant to recover the humanity associated with live performance, *Transilvanian Hunger* fails, something Hagen acknowledges: "most of the songs sustain the same simplistic beat at approximately the same tempo with little in the way of fills or changes."[28] Turning up repetition at all levels, transformed death metal's virtuosic twitching into exercises of endurance. But Fenriz's drumming is more than just endurant: it maintains blast beats in strict tempo, across unedited takes, for minutes on end. As Morrisound's engineers noted, this feat was rare among the death metal bands they worked with. The "black" precision, then, did not come from the analog past—nor did the repetitiveness, necessarily. The commonly acknowledged sources for black metal's turn to simplicity and repetitiveness, in both scholarly and scenic sources, are the three bands named

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towards various "blackened" revivals of older metal and punk styles, but with a lower dose of "black."

[27] Reyes, "Blacker than Death: Recollecting the 'Black Turn' in Metal Aesthetics," 240.

[28] Hagen, *Darkthrone's A Blaze in the Northern Sky*, Location 1216.

above, and Von—an obscure California band, who evoked arcane rituals with songs that drew out one or two riffs over minutes. Fenriz recalls that heard in opposition to death metal, "Von was a big hit among us up here when it hit us in 1992. Monotone stuff was very fresh after 10 years of hectic metal styles. […] There was no time to play a riff eight times for instance… not until Burzum and Von came and changed things."[29] But some of this change came from beyond metal altogether.

Black metal's disenchantment with death metal sparked a passion for natively electronic—and digital—genres. This source inspiration for the new "black" doesn't just explain extensive repetition, but also machine-like precision and conspicuous formal designs.[30] Around 1992, Varg frequented a club that played "mesmerizing" house and rave music, which he credits as a major influence: "[…] underground house music influenced my music a lot in this period. It made it more monotonous, and the tracks became longer, which made it sound different from most other metal music."[31] Fenriz, who was always particularly close with Vikernes, recalls getting into electronic dance music in 1992 when asked about it in a fanzine—though he expresses a preference for breakbeat and dub, as opposed to house.[32] To this day, Fenriz performs as a DJ.)

That musicians who espoused (and in Varg's case, still espouse) white supremacist beliefs expressed such open enthusiasm for these electronic genres speaks to the power of records. As commodities, they remove sounds from their original communities—largely black, queer, and American in the case of house and techno. With their visual anonymity, the 12-inch white label records Fenriz remembers buying bear no mark of identity. Thus whitewashed, they sounded like the negation

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[29] Grow, "Web-Exclusive Interview: Darkthrone's Fenriz, Part 3." Fenriz also discusses it in similar terms in Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 184–85.

[30] Hagen suspects Krautrock as an influence—which makes sense, given the scene's connection with Klaus Schulze through Euronymous, who solicited the intro for Mayhem's *Deathcrush* from him. For the Schnitzler encounter, see. Kristiansen, *METALION: The Slayer Mag Diaries*, 54.

[31] "Burzum: Heart of Darkness - 'Guitar World' Magazine (April 2010) by Brad Angle."

[32] "Einherjum # 1."

of death metal's hectic pace and cyborg virtuosity. For death metal, athletic aspirations made samples and heavy editing a necessary prosthesis; for electronic dance music, samples and programmed drums were its original body. It was thus pure, "black," much like the analog antediluvians of Venom and Hellhammer were.

The necro aesthetic as an exercise in submission

Transilvanian Hunger's asceticism explains some of its most startling innovations, at least when understood as an attempt to conjure and submit to a law that controls digital temptations. In opposition to death metal, and justified by analog media, the "necro" approach to production, drumming, and form cultivated electronic dance music's mechanically consistent gestures and slow-moving tectonic schemes. The name "necro" is significant: the symbolic proximity of "death" and "necro" expresses black metal's imaginary fear of being replaced by, and desire to replace, death metal. Since their names suggest equivalence, difference has to be escalated—black metal had to become everything death metal now lacked to carve out a legislated place for itself.

The challenges that Fenriz imposed on himself when he recorded *Transilvanian Hunger* were an offering to the law he needed: an exercise in self-denial and submission, which turns death metal's self-undermining display of virtuosity inward. Example 19 transcribes the complete guitar and drum parts of the eponymous opening track, as well as how these riffs are repeated.[33]

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[33] Like most of the album's songs, it contains three riffs with minor variations. Here, the repetition of riffs adds up to what looks like verse-chorus-verse-chorus-bridge-verse-chorus form, ABABCABA. But the vocals refuse to play along and stay silent during the pseudo-chorus riff b. Across the album, the repetition schemes vary. Some repeat no riffs at all. The next song, "Over fjell og gjennom torner," is has a linear riff sequence, ABC.

Example 19. Transcription of Darkthrone's "Transilvanian Hunger." The drums, recorded first, largely avoid marking the beginnings and ends of riffs. In the case of riffs and c, only the guitar riffs imbue them with metric structure at all—making orientation during recording (and listening) a challenge.

Since Fenriz composed and recorded the album by himself, he had to sequentially make all the choices normally distributed among a band. He recalls that first, he came up with the riffs (synonymous with "the song" in his parlance) on guitar while imagining the drums. He aimed for a longing affect, "trance, and [an] entrancing tempo that was monotone."[34] Once Fenriz had settled on the riffs and their repetition scheme, he recorded the drums. Without guide tracks or other band members, just keeping

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[34] Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 184.

track of where he was in the song demanded focused attention. Consider the blast beat under riff a. Here, Fenriz has to repeat a kick-snare-alternation with an open hi-hat on the kick 256 times before switching to riff b's pattern, which features a crash cymbal hit at its beginning.

Fenriz also exploits the blast beat's metric under-determination to discipline and suppress the skills he acquired as a death metal drummer. By consciously avoiding fills that mark boundaries between riffs, Fenriz breaks with another convention ubiquitous in other metal and deprives himself and his listeners of key landmarks amid the riff repetition. Only by "humming the riffs in [his] head" could he orient himself in their undulating repetition.[35] These riffs employ what Fenriz' has called the "finger-moving" technique," pioneered by Bathory.[36] The different qualities of the intervals arising between the two tremolo-strummed voices yield more-or-less faint dynamics owing to the heavy distortion. And up to the center of the song, riff c, they do a good enough job of providing some sense of slow-moving meter atop the blast beats. But now, obscurity peaks, as a slow alternation of E and F minor triads receives ever-new strumming patterns. I don't notate them, because their rhythms are *meant* to be obscure. A similarly coloristic nuance may be observed in Fenriz's drumming, which employs a different cymbal for the eighth-note pulse in each riff: hi-hat, ride, crash. There is a sadomasochistic dimension to making a human perform this repetitive and undifferentiated material with precision and uniformity. Given the limits of attention and entrainment, this is material that should be left to a machine—and, heard through the lo-fi record, ends up sounding close to a drum machine in anyways. But this dehumanization, the waste of individual potential—of freedom that could be misused—*is* the point of this offering to the law black metal needs.

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[35] Mudrian, 183.
[36] For a detailed genealogy of black metal's characteristic guitar techniques, albeit in German, see Walch, "'Was Niemals War' – Das Selbstbewusstsein Des Norwegischen Als Konstruktion Einer Vergangenheit Und Konstitution Einer Klanglichkeit."

Once it was permissible to let blast beats run on like a machine, this allowed for formal designs that shifted the time scale of curated limit experiences. Death metal's rapid changes and impossibly hard-hitting performances yank listeners around, grindcore invites listeners into grooves and kicks them out with slapdash bursts of noise. In these subgenres, contrasts of tempo and beat subdivision occur seconds apart. By contrast, black metal invites listeners to get lost, to literally lose count, in its repetitions and uniformity. *Transilvanian Hunger* maintains the kick-snare alternation transcribed above for over eighteen minutes, all the way into the fifth song, "Graven Takeheimens Saler." At 0:53, drums mirror a dotted-eighth-sixteenth rhythm in the guitars with kick and snare hits—but still at the same 140 quarter note (or 70 half note, given the alla breve feel of the riffs) beats per minute tempo. This brief relaxation, the lowest-density kick-snare alternation pattern on the entire album, is what Fenriz calls a "tempo change."[37] After the song, the original blast beat returns—but the tempo remains constant to the end. The effect is hard to explain in terms of black metal's analog ancestors. Hellhammer would struggle to maintain the tempo within a song—let alone across an album. Yet once one conceives of *Transilvanian Hunger* as a beat-matched DJ set, where one beat, at one tempo, runs through much of the evening, things fall into place. Even the singular, climactic pattern change makes sense now: by letting the kick drum "breathe," it introduces a heavier bass—a bass drop, in the language of turntable-based music.

Thus, one of the most uncompromising expressions of black metal fused the imaginaries of metal's analog past and electronic music's present, two archives construed as pure—unlike death metal's tainted technological hybridity. Precise, disorientingly self-similar repetition at the micro-level serves tectonic collisions at the macro level. Fenriz terms this effect the "monotone over the monotone,"

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[37] Mudrian, *Precious Metal: Decibel Presents the Stories behind 25 Extreme Metal Masterpieces*, 186.

explicitly likening it to electronic music and totalitarian control, exercised by a dictator: "Whether it's electronic or not, when it's really sounding a bit totalitarian, then you know it's the work of one guy, one dictator."[38] While this formulation may evoke individual empowerment or the Romantic creative genius, it also recalls Stalin's evocation of the iron laws of history—a symbolic mandate as a cover for unfettered, rapacious enjoyment. Fenriz "had to make" *Transilvanian Hunger*, as the logical distillation of the ultra-black, "necro" revision of death metal. What's more, Fenriz' isn't just the dictator as the tool of history. He's also the dictator's subject, a tool that toils in ways that should be mechanized, that suggest mechanization—but aren't. Far from celebrating freedom, black metal—perversely—delegates its agency to the appetites of its enemies and the whims of its tools.

Conjuring feral law with found tools

While Darkthrone's *Transilvanian Hunger* may attract ridicule from outside black metal, Ildjarn's black meal releases divide even hardened fans of the subgenre with their drastically ruined-sounding recordings, two steps below what would conventionally pass for low fidelity. But Ildjarn also has a different side: spacious, serene soundscapes woven from airy samples, which, in their dialog with their fierce analog flip-side, illuminate how black metal could use both analog and digital tools to frame the law that it sought to conjure—and how this object-oriented ontology can interface with far-right ideology.

Feral ideology and the worship of the concrete

One reviewer memorably describes Ildjarn's raw black metal releases as "Darkthrone-gone-wrong," a metaphor that gets us closer to music that is unmusically drastic by design.[39] *Transilvanian Hunger*'s

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[38] Mudrian, 185.
[39] "The Metal Crypt - Review of Ildjarn - Ildjarn-Nidhogg."

"necro" production suggests events at an icy distance, transparent and touchless. But on albums like *Strength and Anger*, Ildjarn's take on four-track-one-person is damp and claustrophobic, a throbbing mass of noise trapped in a space too small to contain it. The guitars are tonelessly distorted and barely suggest pitches as they fade into granular noise, alternating between faint power chords and fainter imperfect and dissonant intervals. Through this ragged strumming, equally distorted snarls and a clean-sounding bass try to fight their way to the surface, only to be stomped out by a polka-like "Slayer" beat at almost all moments. The relentless drums push the mix hard enough to clip it, blotting out all other events with a strobe-like periodicity. Riffs blend into each other, and the most notable changes are a handful of tracks that drop one layer, temporarily lightening the thicket to reveal a streamlet of melody—before returning to a full, pounding roar.

Whether in its feral or idyllic guise, Ildjarn rejects human culture and its laws, and instead celebrates nature as an amorally just process. Consisting of one Vidar Våer and active at the fringes of Norway's black metal scene from 1992 to 2005, Ildjarn's titles and visual subjects speak of landscapes, seasons, and hate—anything untamed. In a rambling, racist, sexist, and yes, self-admittedly perverse manifesto, released as part of the *Ildjarn is Dead* compilation, Våer expresses his naturalist anti-universalism in many permutations:

> If I tell a regular person that I think animals are worthy of life, as opposed to humans, they tend to just regard me as a freak and this without even having thought through it. The majority of people live their lives thinking humans are in a position to rule this world as a matter of course—which they of course do, but in ignorance. [...] Mankind's inability to act according to the laws of nature has been proven over and over again.[40]

Here, the perverse law to be completed is singular and beyond the Symbolic altogether—and human subjectivity is rejected *because* it participates in that universal if incomplete, supernatural system. While

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[40] Ildjarn, *Ildjarn Is Dead*.

the neurotic submits to the Symbolic, rejecting the drive, the pervert refuses to submit to the universal castration of the Symbolic, and the cultural recognition it offers—instead choosing the muteness of the drive, legislated by an ersatz-law that has to be created on the spot, again and again.[41] Many of Ildjarn's songs sound like—and purportedly are—the result of spontaneous improvisation, a once-now-here-only, but embedded into a network of cross-references and balanced contrasts.

With their noisy surface, audible count-ins, and frayed endings, Idljarn's black metal songs perform accidentality—they are not accidents but aspire to be. This shifts the perception of form and order to a level above the individual song, to the ordering of songs. *Strength and Anger*, for example, divides into two complementary halves. The first forty minutes feature fifteen raw tracks with a typical metal ensemble of drums, bass, guitars, and vocals; the latter, vocal-less thirty minutes consist of two dark ambient "Hate Meditations" that sandwich a brief "Interchange" for drums and distorted bass. That brief, percussive interlude is key: the textures of the two halves thin and thicken in complementary ways. Ildjarn's relentless drums dominate the first half but go silent in the highly dissonant seventh song. In a rough approximation of what the ambient tracks will sound like, the bass and the upper part of the guitar riff oscillate around the riff's lower drone—white noise, but with a harmonic undercurrent. The ambient half sounds like an afterimage of the metal half, inverting the timbral palette: the slowly shifting collages of noise and analog sine-wave drones mirror the fuzzy dissonances former eye of the storm, while the interlude pounds where the subtractive climax of the first half didn't. While the cumulative effect resembles that of *Transilvanian Hunger* in its temporal scale, it doesn't suggest total control—rather, a tentative order appears to form out of found objects, with timbres and tempos fluctuating between songs like the weather of individual days during a season.

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[41] Fink, *A Clinical Introduction to Lacanian Psychoanalysis*, 173.

Black metal's relationship to the law, as practiced by Ildjarn and similarly minded bands, can be characterized as worship of the concrete. It is a particular kind of object-oriented ontology, a pre-pagan reverence for materiality that culminates in philosophies that may be described as further-right-than-fascist—such as the dark core of Martin Heidegger's philosophical project. As Žižek notes, Heidegger critiqued "actually existing Nazism" from the right, faulting its exhortation of racial community for clinging onto humanism and blunting its destructive force—"barbaric principles" that he believed could undo what he saw as the nihilistic consequence of post-Socratic Western thought.[42] The pre-Socratic law that Martin Heidegger sought to recover is the philosophically distilled expression of the law black metal appeals to in its opposition to universality and its agent, subjectivity. The term "law" doesn't capture what Heidegger intends, since it implies subjects *of* and subjects *to* the law, and any detached subject—be it a self-legislating enlightened one or an individual god—is suspect to him. Rather, it is the thing, the Germanic *Ding*, the Latin *res*, which originally denoted a communal assembly that—at one spot, at one time, and once only—decides what is just.[43] Heidegger finds further traces of this objective alternative to law and subjectivity in the *horae*, the seasons, the *daimons*, which are "not individual, immortal, remote and personified gods, but communal and mortal forces, living and dying and living again in the cycle of seasons."[44] Arising and passing as ordering violence, this *daimonic* law cannot be written nor can it be applied to other cases—it is finite and eternal at once, an emergent property of nature.

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[42] No doubt the likes of Vǻer or Vikeneres would endorse the full quotation from the *Black Notebooks*: "National Socialism is a barbaric principle. Therein lies its essence and its capacity for greatness. The danger is not [Nazism] itself, but instead that it will be rendered innocuous via homilies about the True, the Good, and the Beautiful." Žižek, "The Persistence of Ontological Difference," 188.

[43] The connection Heidegger makes between law and technology, relevant for my argument below, emerges most clearly when one reads the essay "The Question Concerning Technology" in light of its preparatory presentations, like "The Thing"—as Rose does. Rose, *Dialectic of Nihilism: Poststructuralism and the Law*, 64.

[44] Rose, 73–74.

Anti-subjectivism needs the machine

Yet in the scene Ildjarn constructs, the wish of submitting to the impersonal tides of the natural is also staged by mechanizing one's aural appearance. Being confused for a machine becomes a point of pride, in so far as the machine—like an animal—only fulfills its natural purpose, as opposed to exercising freedom, chasing desire, and potentially being led astray in the Symbolic—as a human might. After putting down the precision of his drumming, Våer humbly brags:

> "I was maybe too harsh on myself there, after all, in some reviews editors believe I use artificial beat, and one wouldn't expect drum machines to be untight. An electric current just doesn't work that way and cant cause appliance to behave in such an erratic way. Humans, on the other hand, are fully capable of behaving erratically all the time."[45]

The confusion isn't baseless. Ildjarn's collaborations with a musician known as Nidhogg, released as Ildjarn-Nidhogg and Sort Vokter, use a drum machine and keyboards alongside guitars. These often stage prolonged cross-fades between the two timbral poles, another permutation of the ambient effect explored in the "Hate Meditations." And some Ildjarn-Nidhogg releases, like the ambient album *Hardangervidda*, feature only keyboards, as clarion leads and loops, over sequenced drums. The presence of programmed and sampled sound in Ildjarn's wider oeuvre thus enables a key effect of the project's feral side. In the shadowy realm conjured by the four-track machine, the possibility of using a drum computer allows Våer to blend in with its inhuman, mute drive.

The underlying naturalist, object-oriented ontology also explains the reason cited for Ildjarn's death. The project couldn't outlive the demise of its four-track recorder. While Darkthrone's "Necrohell studio" was just one of many possible means of production, ostensibly, the unique sonicity of Ildjarn's four-track recorder *was* an indispensable part of the project: "The 4-tracker is now

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[45] Ildjarn, *Ildjarn Is Dead.*

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destroyed, so I can never make any more Ildjarn music. The sound would not be the one I'm after."[46] But it is not just a matter of sound. If Ildjarn's goal was to produce rough-sounding, low-fidelity material, or to improvise in seclusion, a replacement could have been found. But clarity or potential mainstream appeal was a secondary concern for black metal; the affront was that sounds became transferable and repeatable between bands and albums due to death metal's pursuit of virtuosity. By letting Ildjarn die with its four-track record, Våer disavows his subjectivity as constitutive of the project, the law that guaranteed its coherence.

Denying Ildjarn an abstract existence beyond the concrete, temporally and locally singular assembly of anonymous, but irreplaceable equipment and in-the-moment inspiration gets us the heart of black metal's negation of death metal—and why this negation could be achieved by embracing, rather than rejecting, novel technologies. Gillian Rose has pointed out that *Gestell*, Heidegger's term for technology as a framework, can be understood as an alternative to *Gesetz*, the law as something that is posited ("gesetzt") by some subject. Rather, the *Gestell* is placed ("gestellt") before the subject, as a limit to what being can disclose.[47] Understanding *Gestell* as an enlarged, universalized version of the *Ding*, the ad hoc court framing a matter of concern illuminates the link between Heidegger's enthusiasm for a pre-Socratic sense of justice, and his belief that the "barbaric principle" of National Socialism may tear asunder the total *Gestell* of modern technology.[48] Outside of his private *Black Notebooks*, in "The Question Concerning Technology, Heidegger expresses this millenarian hope in a

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[46] Ildjarn.

[47] Rose, *Dialectic of Nihilism: Poststructuralism and the Law*, 82–83. That Heidegger intends *Gestell* as an alternative to *Gesetz* also shines through in his anti-subjective definition of freedom, which is open within its framework. When in "The Question Concerning Technology," Heidegger writes that "freedom of the open consists neither in unfettered arbitrariness nor in the constraint of mere laws," this differentiates his concept from subjectively legislated notions of freedom. Heidegger, *The Question Concerning Technology, and Other Essays*, 25.

[48] The Black Notebooks were not available to Rose but appear to corroborate her interpretation.

less martial register by quoting Holderlin: "But where danger is, grows the saving power also."[49] The thought seems the same to me: modern technology, which has concealed Being by eliminating distance and turning everything into a means for something else, might also become the court that passes judgment on itself, restoring the concrete and particular over the abstract and universal.

With its perversely singular creative acts, black metal holds court on death metal. The unnamed, found framings stand in for "nature," as the source of a wholly particular law, impossible to separate from one particular point in space and time.[50] Boasting about using cheap, found equipment is a trope in black metal. Once more, Burzum's Vikernes—ideologically close to Våer, though more personable—spells out the core content of the practice most clearly. Refusing to name the brands used, making music with found assemblages, and not correcting accidents—even in the context of mechanically precise playing, even when drum machines are used—are safeguards against repeatability and emulation.[51] Thus, black metal did not need to confine itself to the technologies of extreme metal's analog past, so long as used keyboards, drum machines, and sequencing to resist what sounded—to black metal's true believers—like vain subjectivity and rapacious universality in death metal. In my concluding example, I consider how this rejection could legislate fully sequenced takes on black metal, where guitars are an afterthought—a kind of metal beyond metal that, nonetheless, remains shackled to the memory of the analog-digital transition.

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[49] Heidegger, *The Question Concerning Technology, and Other Essays*, 28.

[50] To put it in the Marxian terms of Chapter 2, the aspect of capital that threatened black metal's ideological core wasn't the concrete inequality it produces, but its universalizing tendencies.

[51] "The focus on instruments, brands, sound studios and "production" is actually one of the things I rebelled against in 1991. […] The natural is always the best, whether we are talking about music or something else. The natural and best music is (as I see it) music with "soul", and not music that has been polished for months in a studio to remove even the tiniest mistakes (peculiarities)." "Burzum: Heart of Darkness - 'Guitar World' Magazine (April 2010) by Brad Angle."

Losing the drummer

Summoning embodies black metal's essential rejection-as-embrace of the digital in a form that is doubly pure: unburdened by reactionary ideology of any sort, and more unabashed in its embrace of digital sampling and sequencing than any prior example.[52] As such, Summoning's case is a fitting conclusion that demonstrates the innovative license that could be claimed through an ostensible rejection of death metal's digital polish.

With 1995's *Minas Morgul*, the Austrian black metal Summoning band arrived at their distinctive take on black metal, an epic—in the sense of detached, deliberate, and expansive in its unfolding—sonic exploration of J.R.R. Tolkien's fantasy world. On *Minas Morgul*, and all subsequent Summoning releases created by the duo Michael "Silenius" Gregor and Richard "Protector" Lederer, sampled drum loops, soaked in reverb and spread across the stereo space, support equally synthetic-sounding keyboard melodies. Sounds fit for a mid-1990s PC game weave around with guitar riffs, riffs that are just one voice among many equal parts. Aurally, we are far away from the minimalism of Darkthrone or Ildjarn, still the obvious model on Summoning's *Lugburz*, released just a few months earlier in 1995 as a trio that included the drummer Alex "Trifixion" Trondl. More than anything else, the rasp, high-pitched snarls still recall the harsh timbres of what is commonly considered black metal. But while fans customarily distinguish between the ambient and black metal releases of projects like Burzum and Ildjarn, Summoning, however, is primarily considered a black metal, even when that label is qualified as "atmospheric" or "symphonic" black metal. Summoning maintains this continuity by keeping alive the memory of the rejection that justified their embrace of digital tools, re-narrating it from the mid-1990s to the present.

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[52] Long before explicit anti-fascist/anti-racist sentiments gained greater visibility in the black metal scene, Summoning spoke out against Varg Vikernes' beliefs—while also acknowledging Burzum as an important influence.

Summoning's Eureka moment—when the project found its distinctive voice—encapsulates the topics examined in this dissertation, viewed from the perspective of black metal. The operative word here is "found." Since 1996, Summoning's two remaining members, Silenius and Protector, frame their stylistic shift as the unintended, but fortunate outcome of parting ways with their drummer Trifixion. In a 2018 interview, Silenius lays out the steps, framing the turn to programmed drums as a reaction, not a choice they initiated:

> *Minas Morgul* was the most massive turning point and formed the sound of Summoning as you know it today. A lot of different happenings and decisions lead to this. First we kicked out our drummer and did not replace him. As a kind of revenge we used keyboard drums and made them sound as slow and bombastic as possible in contrary to his hectical [sic] fast drumming. Second we started to compose our songs only on keyboards and not on bass and guitar as before […] Of course i knew that the combination of keyboards and "unreal" drumming was a total blasphemy within the metal scene and seen as total untrue. But on the other side the rising [black metal] scene broke with many values and tore down many many rules that were present within the scene until then. [53]

This basic narrative has been in place since the first published biography of the band, written in 1996, which branded Trifixion as a "commercial thinking asshole"—that is, a death metal drummer. Like Fenriz, Silenius singles out the "hectic" twists and turns of death metal drumming, which other interviews link both to the desire of drummers to show off—that is, to have their individuality shine through—and the increasing complexity and polish of death metal.[54] Thus, by suppressing individuality, programmed drums are framed as a pure, anti-subjective alternative to death metal's Icarus-winged virtuosity. As the actor that forced Summoning to re-act, their former drummer safeguards the legitimacy of their innovation. Black metal could embrace the digital by claiming a self-

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[53] "Interview: Summoning - This Is Black Metal."
[54] Silenius: "And I get better rhythms when I programm them as when I really play them. (real drumer often have the strong desire to proove how good they are in the music, so that they allway play some unneccesary parts to the music.)" Quoted in "Summoning Interview from Metal Realm."

defense situation.

To negate death metal drumming, form, and production, Summoning departs from generic norms of metal that predate death metal, taking full advantage of the keyboard sequencers that were becoming affordable—and not long after, the digital audio workstation. But even if these subversions are achieved using novel tools, they employ familiar tactics. For example, while Ildjarn used minimalist drum programming as a point of comparison to cast doubt on the humanity of his own performances, Summoning's drum programming abandons any semblance of a singular human drummer. Some songs on *Minas Morgul*, like "Lugburz," contain vestiges of earlier metal drumming, fast kick drum runs and kick-snare alternations. Others, like "The Passing of the Grey Company," feature the spatialized, quasi-symphonic drumming of their subsequent releases: stately march rhythms. These are built by ornamenting and subdividing a slow basic backbeat and distributing the resulting attacks among a kaleidoscopic ensemble of drums and cymbals, some large—think kettle drum—some small—think tiny clamps. Dispersed across the stereo channels, and with reverb suggesting a large, cavernous stage, Summoning's percussion suggests multitudes, not one individual or one apparatus.

On the level of form, Summoning retains the "few riffs, but many repetitions" riposte to death metal's hectic cycling through disposable riffs. In Ildjarn and Darkthrone, distorted dissonances and murky production added detail to the repeating riffs—a high-resolution noise, shifting with each repetition. By contrast, Summoning's music eschews noise and the keyboards loop impeccably, while still adding depth and breadth to songs that contain only two or three repeating riffs. Each riff has a maximally polyphonic version, comprising many independent tracks—several keyboard melodies, different drum tracks, and one or two guitar parts—that is revealed bit by bit, as more and more parts enter with each repetition of the riff. This "accumulative form" presents listeners with an "aural jigsaw

puzzle," to borrow Spicer's description of an introductory topos in popular music.[55] Yet in Summoning, the putting-together and taking-apart of this aural tapestry shapes every moment—as loops repeat impeccably, riffs thin and thicken across songs. This development-in-repetition enacts how a listener might focus on different strands at different moment. The polyphonic loops deepen the slow-changing riffs to a point where listeners can get lost in them, just as they might get lost the noisy thickets of Summoning's raw counterparts.

Also present is the object-oriented ontology that disowns tools and avoids imposing names on them. An interview with a French website aimed at metal guitarists, and thus guitar gear enthusiasts, reveals that Summoning's embrace of digital technology allows them to intensify the attitudes we have observed in prior examples. The band's answers to the gear- and playing-focused questions read like a well-written sketch.[56] Asked about their live and studio equipment, Protector answers that they don't play live, do not care for pricey equipment, and that he borrows a guitar from friends only when it is time to record a new album. Asked about how their albums differ in terms of the equipment used, Silenius suggests they don't know, since they never bothered to read the labels when they were still using physical devices and had long switched to virtualized amplifiers and effects pedals. Finally, asked about what their guitar practice looks like, Protector claims that composes riffs on the keyboard, performs them once for a recording—until he has a loop—and then forgets them, moving on to the next riff. Practice and performance are totally subordinated to recordings, the tools used to create those recordings are deliberately obscured: borrowed and nameless, sometimes nothing but transient algorithms that vanish once they have congealed into a record. Thus, each recording is singular, with no live performance to compete with it—and no elements of its sound that could be researched and

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[55] Spicer, "(Ac)Cumulative Form in Pop-Rock Music," 33.
[56] "SUMMONING Interview (Protector and Silenius) - ENG - Guitariste-Metal."

bought.

As I've argued in these three exhibits, the secret to how freely black metal dispensed with long-held conventions of metal music lies in how thoroughly it denies and minimizes its own freedom. Even where its ideology is not reactionary, it has to understand itself as reactive. This is why death metal was so vitally important. Its pursuit of virtuosity—once it necessitated samples, editing, and sequencing—called into question the value of physical mastery. Why try, if it meant relying on alien forces—studios and their boutique sonic signatures? Turning death metal's doubts into full-on negation, black metal rejected the performer's body as a measure of value—ostensibly, to rescue metal from dependencies that threatened to consume it. The memory of the analog-digital transition and its struggles allowed black metal to embrace distinctly post-digital forms, refracting loop-based forms through analog nostalgia.

POSTLUDE. RESCUING INCONVENIENCE

I'll end this dissertation where it began—in extreme metal's present, and on a personal note. Through researching and writing this dissertation, I was guided by—and kept stumbling across—many small losses, where what is lost was some resistance to realizing an intention straightforwardly. In other words, an inconvenience. Inconveniences of finding, categorizing, and repeating sounds. Inconveniences that mattered to extreme metal. Why? Because they elevated an existential, everyday experience into an aesthetic, anti-quotidian sphere.

Although each chapter of this dissertation circles around successively lost inconveniences, my attempts to generalize that loss always feels preliminary. But I will try to spell it out with a final stretta of psychoanalysis and genre, a layering of repetitions. In retrospect, losing inconvenience—the inconvenience of repeating new extremes—is the price extreme metal had to pay to go from *tyche*-as-not-yet-genre to genre-as-*automaton*. I will first explain the italicized psychoanalytic concepts, then their hyphenation with generic repetition.

The italicized Greek terms are Aristotle's, filtered—unfaithfully, and with absolute conviction—through Lacan, who uses them to theorize repetition in and beyond the Symbolic. *Automaton* is the domain of Freud's pleasure principle, it is the subject's intention to seek out past signifiers of pleasure, intentions that issue from the Symbolic. *Tyche*, on the other hand, grasps meaningfully missed repetitions, where the mismatch between Symbolic and Real bares the gaps in meaning that are always there, anyways, when the objective world meets its limits in subjectivity.[1] Thus, *tyche* isn't the opposite of *automaton*: it's *automaton*-plus, repetition with an extra swerve past

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[1] Lacan deploys them in his 1964 seminar centered on repetition. For a sweeping, but in-depth explication of the philological details and extensive connections to the history of philosophy, see Dolar, "Tyche, Clinamen, Den.". A crisp and concise exposition of the pair can also be found in Brodsky, *From 1989, or European Music and the Modernist Unconscious*, 204–7.

identity—the difference in difference.[2]

Now for the genre hyphenations, in reverse order. Genre-as-*automaton* appears as an incidental, unrepeated formation in Brodsky's *From 1989*. There, it captures how the signifier "string quartet" lines up even its most recalcitrant exemplars into what sounds like a game of telephone from Beethoven to Lachenmann, heard through the latter—and the letter, if you'll excuse the pun.[3] The other hyphenated chimera, *tyche*-as-not-yet-genre, is my coinage. Tyche implies an unintended outcome to an intention, albeit one that is not one's own but symbolic, and not-yet-genre implies that even that intention didn't hit its mark—generic repetition, identity—it's still moving towards genericity, asymptotically. As such, *tyche*-as-not-yet-genre generalizes the dynamic of metal-becoming-extreme, the metal Symbolic driven beyond itself in its original analog ecosystem. At that high altitude of abstraction, the scandalous loss was that with new, digital tools, some actors in that network stopped missing—they hit their mark, more and more often. Swerving spirals thus became stable loops— several distinct subgeneric loops. Repetition ceased being an aspirational goal—and became something to be resisted.

Here's my speculative, comically simplified narrative of how extreme metal went from A to B, from *tyche*-as-not-yet-genre to genre-as-*automaton*, from analog to digital, and from none to many subgenres. At point A, you had a bunch of teenagers grappling with the inconvenience of being subject to subjecthood. Metal-becoming-extreme allowed them to externalize the strain of achieving the supra-human aims of the symbolic with human and humble means, a forum that aesthetically dehumanized

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[2] "Tyche is the good and the bad fortune of the signifier. The final essential point is this: tyche and automaton form an opposition, but which should not be understood as a binary opposition (and the binary opposition was at the heart of the symbolic). Tyche is not an entity to be opposed to automaton, but this doesn't turn it into a non-entity. Hence, the conceptual couple forms a two which cannot be counted for two, nor reduced to a one." Dolar, "Tyche, Clinamen, Den," 228.

[3] Brodsky, *From 1989, or European Music and the Modernist Unconscious*, 267.

all-too-human inadequacies in its excitingly missed repetitions. At point B, being a subject is as inconvenient as it's ever been—but now, extreme metal repeats a bit too conveniently. Online collections are speciously complete, immediately accessible, and, worst of all, so well-documented that everything is already familiar—even the yet unheard. If the map of extremity isn't complete, it has at least become impossible to see its gaps. The sounds of legendary places and tools can be downloaded and run on any laptop, becoming reproducible symbolic tokens in a smoothly operating extreme-metal-machine, fully plugged into Web 2.0 infrastructures like Bandcamp. A feedback loop of high-precision categorization and sub-sub-subgenre micro-marketing. Intention and outcome, desire and satisfaction—they've certainly gotten closer. But when extremes meet you halfway, are they still that—extreme?

The loss of limits to repeating its constituent sounds is the final limit of extreme metal: it is the perimeter within which it now stably reproduces its subgenres and analog talismans. What's missing are cracks and crevices of the fading analog era, spaces for musicians and listeners to experience—and imagine—the inconvenient misalignment between intention and actuality in a register grander than their quotidian selves. Thus, this final limit doesn't mean extreme metal ceases to exist. Rather, it ceases to exist outside and beyond itself. The dynamism or metal-becoming-extreme, conserved in diminishing quantities in all later subgenres, congeals into the being of many extremes. Thus purified, extreme metal begins to approximate a stable set of symbols in its digital afterlife. No chess pieces are missing, and no new ones are being carved. The analog souvenirs that point to extreme metal's lost frontiers atone for a resistance to repetition they no longer provide—and remember a time when extreme metal made the inconvenience of not living up to one's intention enjoyable.

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